MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Rights-of-way and Land	02 Insure floodplain and wetland values are approximately equal on both offered and selected tracts in proposed land exchanges or that values are in favor of the United States (0006) (FDR) 03 Classify lands or interest in lands for acquisition where lands are valuable for NFS purposes, according to the following priorities. a. In designated wilderness areas and other congressionally classified areas. b. Where lands or rights-of-way are needed to meet resource management goals and objectives. c. Lands which provide habitat for threatened and endangered species of animals and plants d. Lands which include floodplain or wetlands. e. On lands having historical or cultural resources, outstanding scenic values or critical ecosystem when these resources are threatened by change of use or when management may be enhanced by public ownership (2160GM) (FDR) 04 Classify lands for disposal according to the following priorities: a. To States, counties, cities, or other Federal agencies when disposal will serve a greater public interest. b. In small parcels intermingled with mineral or homesteads patents. c. When suitable for development by the private sector, if development (residential, agri-cultural, industrial, recreational, etc.) is in the public interest. d. When critical or unique resource (wetlands, floodplains, essential big game winter range, threatened or endangered species habitat, historical or cultural resources, critical ecosystems, etc.) effects are mitigated by reserving interests to protect the resource, or by exchange where other critical resources to be acquired are considered to be of equal or greater value. (2161GM) (FDR)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Rights-of-way and Land	05 Effect jurisdictional transfers which achieve the following objectives: a. Reduce duplication of efforts by users and agencies in terms of time, cost, and coordination. b Improve or maintain user access to the administering agency c Decrease travel and enhance management. d Improve public understanding of applicable laws, regulations, policies, and procedures. e Develop more effective and efficient work units f Reduce administrative cost. (0070) (FDR) 06 Acquire private lands needed for big-game winter range. (0319) (FDR)	
Property Boundary Location	01 Locate, mark, and post landlines according to the following priorities. a Lines needed to meet planned activities, b Lines needed to protect NFS lands from encroachment, and c All other lines (0068) (FDR)	
Soil Resource Management	01 Maintain soil productivity, minimize man-caused soil erosion and maintain the integrity of associated ecosystems. a Use site preparation methods which are designed to keep fertile, friable topsoil essentially intact. b Give roads and trails special design considerations to prevent resource damage on capability areas containing soils with high shrink-swell capacity	a Use the following Standards and Guidelines unless more site specific requirements are developed during project design 1 Limit intensive ground disturbing activities on unstable slopes and highly erodible sites 2 Apply Packer's guides in the design for cross drain spacing and buffers

*** - Item following *** has been changed from the original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Soil Resource Management	c. Provide adequate road and trail cross drainage to reduce sediment transport energy	3. Chisel or rip, on the contour, compacted soils Soils are considered compacted if there is a 15 percent increase in bulk density or a 50 percent decrease in macro pore space (FDR)
	d. Revegetate all areas, capable of supporting vegetation, disturbed during road construction and/or reconstruction to stabilize the area and reduce soil erosion. *Use less palatable plant* species on cuts, fills, and other areas subject to trampling damage by domestic livestock and big game to discourage grazing by herbivores (6322)	
	e Prevent livestock and wildlife grazing which reduces the percent of plant cover to less than the amount needed for watershed protection and plant health	
	f Place tractor-built firelines on the contour, where possible, and avoid use of tractors on highly erodable sites.	
	g. Provide permanent drainage and establish protective vegetative cover on all new temporary roads or equipment ways, and all existing roads which are being removed from the transportation system.	
	h. Minimize soil compaction by reducing vehicle passes, skidding on snow, frozen or dry soil conditions, or by off-ground logging systems	
	i Restore soil disturbance caused by human use to soil loss tolerance levels commensurate with the natural ecological processes for the treatment areas. (0608) (FDR)	
	02 1) Obliterate and rehabilitate those existing travel ways identified for return to resource production (2214 GM) (FDR)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Soil Resource Management	03 Identify at the project level, upland areas that are immediately adjacent to Riparian (Prescription 9A) Management Areas. Adjacent upland areas are those portions of a management area which, when subjected to management activities, have a potential for directly affecting the condition of he adjacent Riparian Management Area. The magnitude of effects is dependent upon slope steepness, and the kind, amount, and location of surface and vegetation disturbance within the adjacent upland unit. (848) (FDR)	a. The following is a guide to identify the approximate extent of adjacent upland areas: Slope gradient of upland areas adjacent to Riparian Management Area / Upslope distance from boundary of Riparian Management Area % Slope Range: / Feet: 0-20 / 100 20-30 / 180 30-40 / 280 40-50 / 400 50-60 / 520 60-70 / 640 70-80 / 760 80-90 / 880 90-100 / 1000 100-150 / 1000-1300 (6698) (FDR) b. Reduce, through designed management practices and appropriate erosion mitigation and vegetation/mitigation measures the project caused on-site erosion rates (calculated with appropriate Universal Soil Loss Equation methodology by 75% within the first year after disturbance. Reduce project caused on-site erosion by 95% within five years after initial disturbance (USDA Tech, Pub. SA-TP 11, 1980. USDA SCS Tech. Note No 10, 1977) (6700) (FDR) c. Design continuing mitigation /restoration practice and follow-up maintenance activities to insure 80% original ground cover (vegetation) recovery occurs within five years after disturbance. (6700) (FDR)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Transportation System Management	*** 01 Prepare Forest Development Transportation Plan per direction in FSM 7710.	
	02 Classify areas as to whether off-road vehicle use is permitted (0452) (FDR)	a. Specify off-road vehicle restrictions based on OHV use management (FSM 2355, R2 Supp 88) (6083) (FDR)
	03 Close all newly constructed roads to public motorized use unless documented analysis shows a Use does not adversely impact other resources; b Use is compatible with the ROS class established for the area, c. They are located in areas open to motorized use; d. They provide user safety; e. They serve an identified public need, f. The area accessed can be adequately managed; or g. Financing is available, or can be arranged, for maintenance (0075) (FDR)	
	*** 04 Manage public motorized use on roads and trails to maintain or enhance effective habitat for elk (3201 GM)	a. Objective level of habitat effectiveness for elk within each fourth order watershed is at least 40% (i.e. 40% or above) (9200 GM) *** b. Habitat effectiveness will be determined by evaluating, in combination, hiding and thermal cover, forage, road-density and human activity on roads. The HABCAP model accomplishes this analysis. (refer to the definition of habitat effectiveness in the glossary)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES

CONTINUATION OF.
Transportation System Management

The road density portion of this analysis is defined as the average adjusted miles of open road and motorized trail per 640 acres in a fourth order watershed Adjusted miles are calculated by multiplying the miles of road type by their coefficients:

Road Type	Average Daily Traffic	Coefficient
Primary	>5 vehicles/day	1.0
Secondary	1-5 vehicles/day	0.7
Primitive	<1 vehicle/day	0.05
(Closed	none	0.00)

The sum of average adjusted miles is then compared to the following table and the road density/use habitat effectiveness is determined:

Average Adjusted Miles of Open Roads/Trails	Road Density/Use Habitat Effectiveness
0	100%
0.5	80%
1.0	60%
2.0	50%
3.0	40%
5.0	20%

(9201 GM)

05 Manage road use by seasonal closure if:
- a Use causes unacceptable damage to soil and water resources due to weather or seasonal conditions;
- b Use conflicts with the ROS class established for the area;
- c Use causes unacceptable wildlife conflict or habitat degradation;
- d Use results in unsafe conditions due to weather conditions;
- e They serve a seasonal public or administration need,
- f. Area accessed has seasonal need for protection or nonuse

(0076) (FDR)

*** - Item following *** has been changed from the original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Transportation System Management	06 Keep existing roads open to public motorized use unless; a. Financing is not available to maintain the facility or manage the associated use of adjacent lands, b. Use causes unacceptable damage to soil and water resources; c. Use conflicts with ROS class established for the area, d They are located in areas closed to motorized use and are not "designated routes" in the Forest travel management direction. e. Use results in unsafe conditions unrelated to weather conditions, f. There is little or no public need for them; or g. Use conflicts with wildlife management objectives (0077) (FDR) 07 Closed or restricted roads may be used for and to accomplish administrative purposes when: a Prescribed in management area direction statements; b Authorized by the Forest Supervisor; and c In case of emergency. (0078) (FDR) *** 08 All existing roads not needed for multi-resource management will be obliterated at the earliest opportunity Reduce existing open road mileage in project areas whenever possible (3200 GM)	
Arterial and Collector Road Construction and Reconstruction	01 Construct and reconstruct arterial and collector roads to meet multiple resource needs. (0083) (FDR)	a Construction and reconstruction standards for arterial and collector roads are: Standard: Arterial — Travel Speed: Average 30-55 mph; Lanes: Generally 2 lanes Standard: Collector — Travel Speed: Average 10-30 mph; Lanes: Generally 1 lane

*** - Item following *** has been changed from the original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES		
CONTINUATION OF: Arterial and Collector Road Construction and Reconstruction		Surface.	All weather, generally asphalt or gravel	Generally gravel or native surface, sometimes asphalt
		Width.	Typically 20 to 24 feet, but some single lane with inter-visible 10-foot turnouts	Typically 12 to 16 feet, with inter-visible 10-foot turnouts
		Drainage	Permanent not to impede traffic	Permanent but may impede traffic
		(6039) (FDR)		
Local Road Construction and Reconstruction	01 Construct and reconstruct local roads to provide access for specific resource activities such as campground, trailheads, timber sales, range allotments, mineral leases, etc , with the minimum amount of earthwork. (0084) (FDR)	a. Construction and reconstruction standards for local roads are.		
		Travel Speed	Average less than 20 mph Speed	
		Lanes	Usually single lane except for developed recreation sites	
		Surface.	Varies from asphalt to Native surface, majority native surface.	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Local Road Construction and Reconstruction		Width: Typically 10 thru 14 Feet Turnouts optional depending upon traffic management Usually not intervisible. - Drainage: Dips and culverts - (6040) (FDR) b. Update adopted VQO when new or improved roads establish and change viewer sensitivity for an area. (9500)
	*** 02 1) Construct temporary roads for specific resource activities such as timber sales, emergencies, (e g. fire suppression), or mineral exploration. Roads needed beyond the timber sale or minerals exploration activity shall be specified roads (i.e , not temporary). 2) Temporary roads shall not be designated as Forest development transportation facilities and shall not be recorded in the transportation inventory system 3) Forest Road and Trail funds shall not be used for temporary road construction and/or rehabbilitation 4) All temporary roads shall be obliterated as defined by the Forest Plan Glossary. Ninety percent of the obliterated temporary road mileage will not have sustained use three years after obliteration (2213 GM) (FDR)	a. Construction Standards for temporary roads are Travel Speed: Less Than 10 mph - Lanes: Single - Surface: Usually native. Width: Typically 10 thru 14 feet The minimum width is desired to minimize surface disturbance - Drainage: Temporary: Drain dips, low water crossings, culverts. - Rehabilitation: Return to resource production within one year from cessation of activities. (8202GM) (FDR)
Road Maintenance	01 Maintain all roads to the following minimum requirements a All paved roads - Level 5. b. All arterial and open collectors - Level 3, c. All open local roads - Level 2, and d. All closed roads - Level 1 (2200GM) (FDR)	a See levels of maintenance in FSM 7730. (6274) (FDR) b. Level 1 maintenance includes upkeep of drainage structures and vegetation cover necessary to prevent erosion. (6324) (FDR)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Road Maintenance	02 Maintain structures, bridges, cattleguards, etc , to be structurally sound and safe for use (0080) (FDR)	
Trail System Management	01 Maintain all trails for foot and horse travel unless specifically closed to either or both class of user. (0451) (FDR)	
	02 Maintain all trails to the following minimum requirements	
	a Structure (bridges, corduroy, etc) are structurally sound and safe for specified class of user,	
	b Maintain drainage structures to prevent unacceptable resource damage, and	
	c Remove hazards from trails to allow safe passage for specified class of users A safety hazard is a physical condition of a trail which may cause injury, is unusual or unexpected, and not readily identifiable by the trail user It is not a condition which is easily identifiable and normally encountered for the type or location of the trail involved The following examples illustrate this distinction.	
	A hazard is a rotten bridge decking or handrail A stream crossing where no bridge is provided and the user would expect this on the type and location of the trail is not a hazard	
	A hazard is a stable-appearing loose rock in a constructed treadway where all other rocks are stable A trail treadway made up of rocks in a near-natural position, many of which are loose, is not a hazard	
	A hazard is a perennial bog-hole on a horse trail An intermittent bog-hole which will dry up by early summer or within a few days following a rain storm is not a hazard	
	A hazard is a section of trail treadway supported by rotten cribbing A section of trail where the treadway is obviously slippery is not a hazard	

*** - Item following *** has been changed from the original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Trail System Management	A hazard is a marked ford with holes deeper than the normal channel. A deep ford with a consistent stream bed is not a hazard (0074) (FDR)	
	03 Provide a full range of trail opportunities in coordination with other Federal, State, and municipal jurisdictions and private industries both on and off NFS lands. (0455) (FDR)	
	04 CONTINENTAL DIVIDE NATIONAL SCENIC TRIAL (CDNST): Apply Interim Management for the CDNST corridor to identified alternative routes utilizing both existing trails and roads and nonexisting routes which may be used as connecting travel segments Interim management will establish visual quality objectives for the Foreground and Middleground areas within the corridor (0354) (FDR)	a The CDNST corridor is that area which encompasses the foreground and middleground of the seen-area as viewed from the alternative travel routes identified in the CDNST Comprehensive Plan Interim management which protects the recreation opportunities will be applied until such time that a specific trail route is formally designated as a part of the CDNST System (6198) (FDR) b All travel route alternatives within the CDNST corridor have a Visual Management System (VMS) sensitivity Level I classification until a specific trail route is formally designated Foreground and middleground areas within the corridor will meet the highest visual quality objective available within the existing visual condition class constraints and the visual quality objective of the management area (6199) (FDR)
	05 Do not mark existing travel routes as being a part of the CDNST system until they have been formally designated. (0355) (FDR)	
	06 Upon formal designation of a travel route segment as a part of the CDNST system, manage the segment to emphasize foot travel, provide for horse	a The formally designated CDNST travelway will have sensitivity Level I classification. Foreground and middle-

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Trail System Management	use where safe to do so, and the continuation of of motorized use where presently permitted and considered appropriate in the management direction for the overall management area. Give consideration to the needs of the long-distance traveler. (0356) (FDR)	ground areas, as seen from the trail, will meet the highest visual quality objective available within the existing visual condition class constraints, and the visual quality objective of the specific management area. (6200) (FDR) b. Mark trail routes using the CDNST logo according to appropriate standards in the Comprehensive Plan. (6201) (FDR) c All other prescribed direction, standards and guidelines for the specific management area through which the (CDNST) passes apply (6203) (FDR) d. Maintain trails in accordance with with Regional Acceptable Work Standards. (FSM 1310 R2 ID No. 1 7/22/82.) (6129) (FDR) e Schedule trail maintenance in accordance with Regional Acceptable Work Standards (FSM 1310 R2 ID No 1 7/22/82.) (6131) (FDR)
Trail Construction and Reconstruction	01 Construct or reconstruct trails when needed as part of the transportation system (0399) (FDR)	a. Cross drains and conveyance structures are planned according to Forest Design Standards (6326) (FDR)
Fire Planning and Suppression	*** 01 Protect life, property and resource values from wildfire in a cost-efficient manner that maximizes the benefits of shared resources and developing technologies. (FSM 5100) (3220GM)	a. Planned budgets and programs are based on an analysis of efficiency and public concern (9220GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Fire Planning and Suppression		*** b Fiscal year fire program activities are based on a cost efficient analysis of budget (9221GM) *** c Wildfire suppression is based on least-cost plus damages with consideration for public concerns (9222GM)
Escaped Fire Suppression	01 Take appropriate suppression action on all escaped fires considering the following: a. The values of the resources threatened by the fire (both positive and negative), b. Management objectives for the threatened area(s), c The fuelbeds the fire may burn in, d. The current and projected weather conditions that will influence fire behavior, e. Natural barriers and fuel breaks, f. Social, economic, political, cultural, and environmental concerns, g. Public safety, h. Firefighter safety, and i Costs of alternative suppression strategies. Use the escaped fire situation analysis to make this determination (FSM 5130 31). (0112) (FDR)	
Fuel Treatment	*** 01 Prescribed fire will be utilized as a vegetative and fuels management technique where it is the most cost-efficient and acceptable alternative to achieve management objectives (FSM 5190) (3221GM)	*** a A historical record will be maintained with each prescribed fire plan which documents the biological/physical effects and the fire behavior which produced the effects. (9223GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Fuel Treatment		*** b Utilize current technologies to achieve an optimum balance between positive and negative effects, and prevent escaped fires. (9224GM)
Air Resource Management	01 Comply with State and Federal air quality standards. (See FSM 2120) (0094) (FDR)	
Insect and Disease Management Suppression	01 Prevent or suppress epidemic insect and disease population that threaten forest tree stands with an integrated pest management (IPM) approach consistent with resource management objectives. (0148) (FDR)	

MANAGEMENT AREA DIRECTION

The management area prescriptions included in this section represent the Management Area Direction applicable to specific land areas. The management area location is illustrated on the Forest Plan Area Map inserted inside the back cover of this document.

The prescription for each management area consists of a prescription summary and a set of management requirements. The prescription summary identifies the primary emphasis of the prescription. Within each management area, a broad range of multiple-use activities can occur. Unless otherwise restricted by statue or policy, commercial timber sales can be scheduled on lands suited for timber production in most management areas. The purpose of the management area designations is to define the management emphasis of that part of the forest and to prescribe specific direction and standards for management activities. Management of these areas differ from each other primarily in how the standards and guidelines differ.

MANAGEMENT AREA SUMMARY

Table III-2 displays the management emphasis and acreage allocations for each management area. The accompanying Plan Map displays where these acres are located on the Forest. The Plan Map shows management area boundaries and numbers corresponding to the management area prescriptions.

Table III-2 also displays (in the three right columns) the acres of lands suited for timber production by management area by aspen and conifer component.

In the Plan 13,599 acres of the Cannibal Plateau Further Planning Area are suitable for inclusion in the National Wilderness Preservation System, and have been mapped as management areas 8A, 8B, and 8C. Until Congress acts, the suitable acres of Cannibal Plateau will be managed to maintain existing wilderness character while still permitting existing uses.

The Fossil Ridge Wilderness Study Area (47,400 acres) and 18,391 acres of the Cannibal Plateau Further Planning Area are not suitable for inclusion in the National Wilderness Preservation System. The Oh-Be-Joyful Wilderness Study Area, 5,500 acres, was not suitable for Wilderness in a Draft EIS transmitted to the Environmental Protection Agency June 4, 1981. These areas have several prescriptions. Until Congress acts, Fossil Ridge and Oh-Be-Joyful will be managed to maintain their existing wilderness character while still permitting existing uses.

TABLE III-2 MANAGEMENT AREA SUMMARY (INCLUDING SUITED TIMBER LANDS)

Management Area	Emphasis	Total Acres	Suited Aspen	Suited Conifer	Total Suited Lands
1A	Developed Recreation Sites.	1,117	0	0	0
1B	Downhill skiing and winter sports.	14,253	0	0	0
1D	Utility corridors and electronic sites.	4,535	0	0	0
2A	Semi-primitive motorized recreation opportunities.	330,508	4,549	29,199	33,748
2B	Roaded Natural and rural recreation opportunities.	51,516	625	6,894	7,519
3A	Semi-primitive non-motorized recreation opportunities.	81,435	525	580	1,105
4B	Wildlife habitat management for one or more management indicator species.	240,595	14,275	19,753	34,028
4D	Aspen managment	61,108	21,452	16,726	38,178
5A	Big game winter range in non-forested areas.	212,754	3,238	6,434	9,672
5B	Big game winter range in forested areas.	23,579	6,773	5,146	11,919
6A	Livestock grazing - improve forage composition.	1,001	1,522	66	1,588
6B	Livestock grazing - maintain forage composition.	829,760	77,165	65,233	142,398
7A	Timber management on slopes under 40%.	549,591	30,816	230,782	261,598
8A	Pristine wilderness setting.	105,475	0	0	0
8B	Primitive wilderness setting.	185,464	0	0	0
8C	Semi-primitive wilderness setting.	176,278	0	0	0
9A	Riparian area management.	25,826	0	0	0
10A	Research Natural Areas.	1,461	0	0	0
10C	Special Interest Areas, Cultural Areas, and National Natural Landmarks.	1,061	0	0	0
10E	Municipal watersheds.	7,440	2,979	0	2,979
	TOTALS *	2,905,027	163,918	380,813	544,731

* There are 2,953,186 acres within the proclaimed National Forest. Adjacent National Forests manage 88,901 acres of this Forest's wilderness while the GMUG mangages 40,742 acres of adjacent Forest's wilderness. Therefore, the GMUG manages 2,905,027 acres.

PRESCRIPTIONS FOR MANAGEMENT AREAS

The following pages display the Management Area narrative summaries and the Management Area Direction on the Grand Mesa, Uncompahgre and Gunnison National Forests.

MANAGEMENT PRESCRIPTION 1A

(Provide a safe and attractive developed recreation setting.)

Management emphasis is for developed recreation in existing and proposed campgrounds, picnic grounds, trailheads, visitor information centers, summer homes groups, organizational camps, lodges, and water-based support facilities. Proposed sites (sites scheduled for development in the plan) are managed to maintain the site attractiveness until they are developed.

Facilities such as roads, trails, toilets, signs, etc., may be dominant but harmonize and blend with the natural setting Livestock grazing is generally excluded from developed sites Existing and proposed sites are withdrawn from locatable mineral entry.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Emphasize visually appealing landscapes (vista openings, rock outcroppings, diversity of vegetation, etc) (0104) (1A)	a. Meet or exceed the Adopted Visual Quality Objective (VQO) of: -patial retention in Development Level 2 Sites -modification in Development Level 3, 4, and 5 sites (8028GM) (1A) b Sensitive level· Development Level 3,4, and 5 sites are Sensitivity Level one (6221) (1A) c. Apply rehabilitation practices where the above objectives are not currently being met. (6068) (1A)
	02 Facilities may dominate, but will harmonize and blend with the natural foreground and middleground landscape. (0384) (1A)	
Recreation Site Construction and Rehabilitation	01 Design facilities and access to provide site protection efficient maintenance, and user convenience Design and develop sites to ensure that developed capacity does not exceed season-long carrying capacity. (0383) (1A) 02 Provide at least 10 percent of the units in level 3 and 4 camp and picnic sites to accommodate two or more family groups (0347) (1A)	a Construct and reconstruct existing and new developed sites in accordance with the guideline in FSM 2331 (6279) (1A)
Management of Developed Recreation Sites	01 Maintain all developed sites in accordance with Regional Acceptable Work Standards. (FSM 1310 R2 ID No. 1 7/22/82) (0386) (1A)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Management of *Developed* Recreation Sites	02 Maintain facilities in a safe condition. Replace facilities when rehabilitation costs 50 percent or more of replacement costs or when existing facilities are no longer compatible with site design or ROS classification. (0387) (1A) 03 Prepare a vegetation management plan for each recreation site The primary objective of the plan is to create and maintain a natural environment (FSM 2331.4) (3034) (1A)	a. *See* FSH 2309.11, Sec 122. (6222) (1A)
Range Resource Management	01 Manage livestock grazing to enhance recreation opportunities in existing and proposed recreation sites (0110) (1A) 02 Exclude grazing of recreational stock and livestock in developed recreation sites during the managed recreation use season. (0059) (1A)	a. Construct fences of material other than *barbed wire around* developed sites. (6281) (1A) a *Maintain vegetation* in mid-seral or better range condition (6061) (1A)
Silvicultural Prescriptions	01 Manage tree stands to enhance visual quality and recreation opportunities on existing and proposed recreation sites. (0115) (1A)	*** a The appropriate harvest methods by forest cover type *are*:

Forest Cover Type	Appropriate Harvest Methods* Even-aged	Uneven-aged
Ponderosa Pine	SW	ST
Aspen	CC	--
Lodgepole Pine	SW	ST
Engelmann spruce-Subalpine-fir Douglas -fir	SW	ST
Mistletoe infected Stands - all species	CC	--

* The following abbreviations are used for harvest methods:

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Silvicultural Prescriptions		SW = Shelterwood CC = Clearcut GS = Group Selection ST = Single tree selection (9106 GM)
	02 Remove unsafe and or dead trees in developed sites. Plant new trees to provide desired tree cover when natural regeneration is insufficient (0466) (1A)	a. See Technical Report R-2-1 (1981) Tree Hazards. Recognition and Reduction in Recreation Sites. (6630) (1A)
	03 Manage forest cover types to perpetuate tree cover and provide healthy stands. (2107GM) (1A)	
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area (2223GM) (1A)	a Prompt control of all wildfires (8220GM) (1A)
Fuel Treatment	01 Maintain fuel conditions which permit fire suppression forces to meet fire protection objectives for the area. (0113) (1A)	a. Reduce or otherwise treat all fuels so the potential fireline intensity will not exceed 100 BTU'a/sec/ft (B138) on 90% of the days during the regular fire season (8224GM) (1A)

MANAGEMENT PRESCRIPTION 1B

(Provide for ski area integrity, safety, and attractiveness)

Management emphasis provides for downhill skiing on existing sites and maintains selected inventoried sites for future downhill skiing recreation opportunities Management integrates ski area development and use with other resource management to provide healthy tree stands, vegetative diversity, forage production for wildlife and livestock, and opportunities for nonmotorized recreation.

Visual resources are managed so that the character is one of forested areas interspersed with openings of varying widths and shapes. Facilities may dominate, but harmonize and blend with the natural setting Harvest methods in forested areas between ski runs is clearcutting in aspen and lodgepole pine, shelterwood in ponderosa pine and group selection in Engelmann spruce-subalpine fir, or as specified in the permittee's site-specific Master Development Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Emphasize visually appealing landscape (vista openings, rock outcroppings, diversity of vegetation, etc) (0104) (1B)	a Meet or exceed the Adopted Visual Quality Objective (VQO) of. - Modification in Ski areas. (9026) (1B) b Apply rehabilitation practices where the above objectives are not currently being met. (6068) (1B) c Meet visual resource management reflectivity standard of 15% or 4 5 on The Munsell Nutral Value Scale (FSM 2380.3), (9027) (1B)
Recreation Site Construction and Rehabilitation	01 Design and locate improvements on winter sport sites to provide safety to users and to harmonize with the natural environment (0358) (1B)	a. Follow construction, reconstruction standards specified in the approved Master Development Plan (6282) (1B)
Management of Developed Recreation Sites	01 Provide opportunities for year-round recreation use of the permitted area and facilities (0359) (1B) 02 Prepare a vegetation Management Plan for each ski area The Primary objective of the plan is to create and maintain a natural environment (FSM 2341 1) (3035) (1B)	
Wildlife Habitat Improvement and Maintenance	01 Emphasize watchable wildlife management (2063GM) (1B)	
Range Resource Management	01 Manage livestock grazing to enhance recreation opportunities in existing and proposed recreation sites (0110) (1B)	a Maintain vegetation in mid-seral or better range condition. (6061) (1B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Silvicultural Prescriptions	01 Manage forest cover types on the permitted area to *enhance visual quality, diversity, and recreation opportunities*, and to provide for a healthy forest cover in existing and proposed winter sports sites (0450) (1B)	a. Apply Harvest methods to forest cover types as specified below or as specified in the permittee's Ski Area Master Development Plan where these plans exist for the area.

Forest Cover Type	Appropriate Harvest Methods*	
	Even-aged	Uneven-aged
Ponderosa Pine	SW	--
Aspen	CC	--
Lodgepole Pine	CC	--
Engelmann spruce-Subalpine-fir		GS
Douglas -fir		
Mistletoe infected Stands - all species	CC	--

* The following abbreviations are used for harvest methods.

SW = Shelterwood
CC = Clearcut
GS = Group Selection
ST = Single tree selection
(9107 GM)

02 Limit timber activities to periods of low recreation use activity or to coincide with ski area construction activity.
(0468) (1B)

03 The combined water yield effects of type conversion on ski runs and increased on-site water from stand regeneration must be determined. Do not exceed threshold limits of water quality and drainage system stability deterioration.
(0610) (1B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Local Road Construction and Reconstruction	01 Design and locate roads in the permitted area: a. To facilitate management of tree stands and wildlife as well as recreation; and b With the minimum of mileage and earthwork. (0467) (1B)	
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (2223GM) (1B)	a. Reduce or otherwise treat all fuels so the potential fireline intensity will not exceed 100 BTU's/sec/ft (B138) on 90% of the days during the regular fire season. (8224GM) (1B)

MANAGEMENT PRESCRIPTION 1D

(Provide transmission corridors which blend with the local environment)

Management emphasis is for major oil and gas pipelines, major water transmission and slurry pipelines, electrical transmission lines, and transcontinental telephone lines. Management activities within these linear corridors strive to be compatible with the management goals of the management areas through which they pass

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and construct utilities to harmonize with the landscape (0295) (1D)	a Use "National Forest Landscape Management", Volume 2-Utilities for principles and concepts (6153) (1D)
	02 Manage for adopted VQO (2022GM) (1D)	
	03 Implement visual resource management, as outlined in the Forest Management Requirements (2023GM) (1D)	
Dispersed Recreation Management	01 Manage dispersed recreation opportunities consistent or compatible with adjacent management areas (0297) (1D)	
Wildlife Habitat Improvement and Maintenance	01 Manage wildlife and fish habitat consistent or compatible with adjacent management areas. (0296) (1D)	
Range Resource Management	01 Manage the range resource consistent or compatible with adjacent management areas (0298) (1D)	
Silvicultural Prescriptions	01 Manage forest cover types consistent or compatible with adjacent management areas. Provide required electrical clearances and minimize the visual impact of the utility right-of-way. (0299) (1D)	
Special Use Management (Non-Recreation)	01 Transportation and utility corridors must be compatible with the Management Area goals through which they pass (2162GM) (1D)	a Corridors shall be designed using the definitions and process established in FSM 1922 51 (8160GM) (1D)

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Rights-of-Way and Land Adjustments	01 Design, construct and maintain electrical transmission lines in accordance with the rules of the National Electrical Safety Code, ANSI Unless otherwise indicated on the plan and profile drawings, all construction and clearances of the transmission line shall conform to the latest edition of the National Electrical Safety Code., ANSI issued by the American National Standards Institute. (0473) (1D) 02 All design, materials and construction, operation, maintenance and termination practices employed in connection with oil pipelines shall be in accordance with safe and proven engineering practices and shall meet or exceed the following a U S A Standard Code for Pressure Piping, ANSI B 31.4 "Liquid Petroleum Transportation system" b Department of Transportation Regulations, 49 CFR, Part 195, "Transportation of Liquids by Pipeline" (0474) (1D) 03 All design, materials and construction, operation, maintenance and termination practices employed in connection with gas pipelines shall be in accordance with safe and proven engineering practices and shall meet or exceed the following a Department of Transportation Regulations, ASME Gas Piping Standards Committee, "Guide for Gas Transmission and Distribution Piping System" (3rd Edition, April 1976) b. 49 CFR, Part 192, "Transportation of Natural and other Gas by Pipelines· Minimum Federal Safety Standards" (0475) (1D)	
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (2223GM) (1D)	a Prompt control of all wildfires (8220GM) (1D)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Fuel Treatment	01 Maintain fuel conditions which permit fire suppression forces to meet fire protection objectives for the area. (0113) (1D)	a. Reduce or otherwise treat all fuels so the potential fireline intensity will not exceed 100 BTU's/sec/ft (B138) on 90% of the days during the regular fire season. (8224GM) (1D)

MANAGEMENT PRESCRIPTION 2A

(Provide for a Semiprimitive motorized recreation experience.)

Management emphasis is for semi-primitive motorized recreation opportunities such as snowmobiling, four-wheel driving, and motorcycling both on and off roads and trails Motorized travel may be restricted or seasonally prohibited to designated routes to protect physical and biological resources.

Visual resources are managed so that management activities are not evident or remain visually subordinate. Past management activities such as historical changes caused by early mining, logging, and ranching may be present which are not visually subordinate but appear to have evolved to their present state through natural processes Landscape rehabilitation is used to restore landscapes to a desirable visual quality. Enhancement aimed at increasing positive elements of the landscape to improve visual variety is also used

The harvest method by forest cover type is clearcutting in aspen and lodgepole pine, and shelterwood for all other forest cover types.

Mineral and energy resources activities are generally compatible with goals of this management area subject to appropriate stipulations provided in Management Activities G00 - G07 in Forest Direction.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities to provide a visually appealing landscape. Enhance or provide more viewing opportunities and increase vegetation diversity in selected areas (0150) (2A) 02 Manage for adopted VQO. (2022GM) (2A) 03 Implement visual resource management, as outlined in the Forest Management Requirements (2023GM) (2A)	
Dispersed Recreation Management	01 Emphasize semi-primitive motorized recreation opportunities Increase opportunities for primitive road motorized trail use. Specify land areas or travel routes may be closed seasonally or year-round for compatibility with adjacent area management, to prevent resource damage, for economic reasons, to prevent conflicts of use, and for user safety (0152) (2A)	a Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp 88) (6083) (2A)
	02 Manage use to allow low to moderate contact with other groups and individuals. (0238) (2A)	a Maximum use and capacity levels are: -Trail and camp encounters during peak use days are less than 30 other parties per day. -Trail and area-wide use capacity ROS Class - Semi-Primitive Motorized Use Level: Very Low; Moderate; High On Trails PAOT/Mile: 2 0; 3 0; 9 0; 11 0 Area-wide PAOT/Acre: .004; .008; 05; 08

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Dispersed Recreation Management (A14 and 15)		Reduce the above use level co-efficients as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25. Reduce the above use levels where unacceptable changes to the biophysical resources will occur (6227) (2A)
	03 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine Shrub and Krummholz ecosystems Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat (0154) (2A)	
	04 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted. (0174) (2A)	a Campsite condition class based upon Frissel, S S , Journal of Forestry, (6278) (2A)
	05 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4 Close and restore class 5 sites (0175) (2A)	
	06 Facilities provided include development level 1 and 2 campgrounds, trails suitable for motorized trailbike use, local roads with primitive surface and parking lots at trail heads Provide signing compatible with intended use. (0153) (2A)	a See FSM 2331 FSM 7732, FSH 7709 12 (Trails Handbook), FSH 7109 11a and 11b (Sign Handbook) (6226) (2A)
Recreation Management (Private and other Public Sector)	01 Encourage development of private sector recreation oriented support services (0161) (2A)	

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Range Resource Management	01 Manage livestock distributions and stocking rates to be compatible with recreation use Locate structural improvements to meet visual quality objectives. (0158) (2A)	
Silvicultural Prescriptions	*** 01 Manage tree stands using both commercial or noncommercial methods Enhance visual quality, vistas, recreation access and dispersal, diversity and insect and disease control. (3108 GM)	*** A Use the following harvest methods at least 80% of the time when applying management to the different forest cover types

Forest Cover Type	Appropriate Harvest Methods*	
	Even-aged	Uneven-aged
Ponderosa Pine	SW	--
Aspen	CC	--
Lodgepole Pine	SW & CC	ST
Engelmann spruce-Subalpine-fir Douglas -fir	SW	GS & ST
Mistletoe infected Stands - all species	CC	--

* The following abbreviations are used for harvest methods

SW = Shelterwood
CC = Clearcut
GS = Group Selection
ST = Single tree selection
(9108 GM)

02 Apply intermediate treatments to maintain growing stock level standards
(0140) (2A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Special Use Management (Non -Recreation)	01 Permit special uses which are complementary and compatible with the kind and development level of the associated Forest Service facilities within the area. (0464) (2A)	a Reference the ROS Users Guide (6230) (2A)
Transportation System Management	01 Roads will not exceed design guides specified in FSM 7721 3 for local roads. Maintain open local roads at Maintenance Level 2. (0494) (2A)	*** a Do not exceed an average open local road density of 2 miles/square mile in fourth order watersheds (9202 GM)
Trail System Management	01 Maintain existing motorized routes or construct new routes needed as part of the transportation system Provide loop routes of one-half to one day's travel time with at least one-half the total route located within the semi-primitive motorized ROS class and suitable for motorized trail bike travel (0164) (2A)	a. Do not exceed an average motorized trail density of 4 mile per square mile on fourth-order watersheds. (6094) (2A) b Do not exceed an average motorized trail density of 2 miles per square mile in nonforested areas of fourth-order watersheds. (6093) (2A)
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area (2223GM) (2A)	a Confine or control wildfires at fire intensity level I and II Control all wildfires at fire intensity level III and above (8221GM) (2A)

MANAGEMENT PRESCRIPTION 2B

(Provided for a Rural or Roaded Natural recreation experience)

***
Management emphasis is for rural and roaded-natural recreation opportunities. Motorized and nonmotorized recreation activities such as driving for pleasure, viewing scenery, picnicking, fishing, snowmobiling, and cross-country skiing is provided for in design and construction of facilities Motorized travel may be prohibited or restricted to designated routes, to protect physical and biological resources.

Visual resources are managed so that management activities maintain or improve the quality of recreation opportunities Management activities are not evident, remain visually subordinate, or may be dominant, but harmonize and blend with the natural setting. Landscape rehabilitation is used to restore *landscapes to a desirable visual quality.* Enhancement aimed at increasing positive elements on the landscape to improve visual variety is also used.

Scenic byways will be a special emphasis within this prescription. They will provide passenger car activities along scenic, cultural and historic routes on the Forest *The primary objective will* be to showcase outstanding National Forest scenery and increase public awareness and understanding of National Forest activities.

The harvest method by forest cover type is clearcutting in aspen and lodgepole pine, shelterwood in interior ponderosa pine, mixed conifer and Engelmann spruce-subalpine fir

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities to provide a visually appealing landscape. Enhance or provide more viewing opportunities and increase vegetation diversity in selected areas. (0150) (2B) 02 Manage for adopted VQO (2022GM) (2B) 03 Implement visual resource management, as outlined in the Forest Management Requirements (2023GM) (2B)	a Arterial and collector roads and trails are Sensitivity Level 1 (6268) (2B)
Dispersed Recreation Management	01 Provide roaded natural or rural recreation opportunities along Forest arterial, collector and local roads which are open to public motorized travel. Manage recreation use to provide moderate to high incidence of contact with other groups and individuals Where arterial, collector or local roads or areas are closed to public motorized recreation travel, provide for dispersed non-motorized recreation with a moderate to high incidence of contact with other groups and individuals in a roaded natural or rural setting (0614) (2B)	a Maximum use and capacity level are -Trail and camp encounters during peak use days may exceed 30 other parties per day. -Trail and area-wide use capacity:

ROS Class - Roaded Natural

Use Level	Very Low	Low	Moderate	High
On Trails PAOT/mile	-	-	-	-
Area-Wide PAOT/acre	04	.08	1.2	2 5

ROS Class - Rural

Use Level	Low	Very Low	Moderate	High
On Trails PAOT/mile	-	-	-	-
Area-wide PAOT/acre	5	8	5 0	7 5

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Dispersed Recreation Management		Reduce the above use level co-efficients as necessary to reflect useable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25. Reduce the above use levels where unacceptable changes to the biophysical resources will occur (6269) (2B) b. Close local roads to public use Designate routes and areas which can be periodically opened to - Gathering firewood - Operating oversnow vehicles. (6328) (2B)
	*** 02 Adopt a system of scenic byways that provides roaded natural or rural recreation opportunities along scenic, cultural or historic routes on the Forest The primary goal will be to showcase outstanding National Forest scenery and increase public awareness and understanding of National Forest activities (3036) (2B) 03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted. (0174) (2B) 04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites. (0175) (2B) 05 Facilities provided include development level 1 and 2 campgrounds, trails suitable for motorized trailbike use, local roads with primitive surface and parking lots at trail heads Provide signing compatible with intended use (0153) (2B)	a Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp 88) (6083) (2B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Dispersed Recreation Management		b See FSM 2331, FSM 7732, FSM 7709 12 (Trails Handbook), FSH 7109 11a and 11b (Sign Handbook). (6226) (2B)
	06 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummhoz ecosystems. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat. (0154) (2B)	
	07 Close roads and trails to motorized travel when the surface would be damaged to the degree that resulting runoff into adjacent water bodies would exceed sediment yield threshold limits. (0616) (2B)	a Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp. 88) (6083) (2B)
Recreation Management (Private and Other Public Sector)	01 Encourage development of private sector recreation oriented support services. (0161) (2B)	
Range Resource Management	01 Manage livestock distribution and stocking rates to be compatible with recreation use Locate structural improvements to meet visual quality objectives. (0158) (2B)	
Silvicultural Prescriptions	*** 01 Manage tree stands using both commercial and noncommercial methods. Enhance visual quality, vistas, recreation access and dispersal, diversity and insect and disease control (3108 GM)	*** a. Use the following harvest methods at least 80% of the time when applying management to the different forest cover types.

Forest Cover Type	Appropriate Harvest Methods*	
	Even-aged	Uneven-aged

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Silvicultural Prescriptions		Ponderosa Pine SW -- Aspen CC -- Lodgepole Pine SW & CC ST Engelmann spruce- Subalpine-fir Douglas -fir SW GS & ST Mistletoe infected Stands - all species CC -- * The following abbreviations are used for harvest methods: SW = Shelterwood CC = Clearcut GS = Group Selection ST = Single tree selection (9109 GM)
Special Use Management (Non -Recreation)	01 Permit special uses which are complementary and compatible with kind and development level of the associated Forest Service Facilities within the area. (0464) (2B)	a Reference the ROS Users Guide. (6230) (2B)
Transportation System Management	01 Manage public use of roads with techniques such as, seasonal closure, time of day closures, etc (0128) (2B)	
Trail System Management	01 Maintain existing motorized routes or construct new routes needed as part of the transportation system Develop loop routes and coordinate them to compliment semi-primitive motorized opportunities in adjacent semi-primitive motorized ROS class areas. (0439) (2B)	
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area (2223GM) (2B)	a. Confine or control wildfires at fire intensity levels I and II. Control all wildfires at fire intensity level III and above. (8221GM) (2B)

MANAGEMENT PRESCRIPTION 3A

(Provide for a Semiprimitive nonmotorized recreation experience.)

Management emphasis is for semi-primitive nonmotorized recreation in both roaded and unroaded areas. Recreation opportunities such as hiking, horseback riding, hunting, cross-country skiing, etc., are available. Seasonal or permanent restrictions on human use may be applied to provide seclusion for wildlife such as nesting for raptorial birds, big-game rearing areas, and mammals (mountain lion, wolverine, etc.) with large home ranges. Visual resources are managed so that management activities are not visually evident or remain visually subordinate

Investments in compatible resource uses such as livestock grazing, mineral exploration and development, etc , occur, but roads are closed to public use.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities to provide a visually appealing landscape Enhance or provide more viewing opportunities and increase vegetation diversity in selected areas. (0150) (3A)	
	02 Manage for adopted VQO. (2022GM) (3A)	
Dispersed Recreation Management	01 Emphasize semi-primitive nonmotorized recreation opportunities. Specific land areas or travel routes may be opened seasonally and with specific authorization to accomplish resource management activities The area is never open for motorized recreation activities except for snowmobiles operating on snow when such use is compatible with the overall recreation and wildlife management objectives (0392) (3A)	a Prohibit or restrict motorized Vehicle use (R2 FSH 2309.26). (6228) (3A)
	02 Manage use to allow low to moderate contact with other groups and individuals. (0238) (3A)	a. Maximum use and capacity -Trail and camp encounters during Peak use days are less than 30 other parties per day. -Trail and area-wide use capacity

ROS Class - Semi-Primitive Nonmotorized

Use Level	Very Low	Low	Moderate	High
On Trails PAOT/ Mile	2.0	3.0	9.0	11 0
Area-wide PAOT/ acre	.004	.008	05	08

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Dispersed Recreation Management		Reduce the above use level coefficient as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25. Reduce the above use levels where unacceptable changes to the biophysical resources will occur (6378) (3A)
	03 Provide facilities such as foot and horse trails, single lane local intermittent roads with primitive surface used as trails, development level 1 and 2 campgrounds, and necessary signing (0394) (3A)	a. See FSM 2331, FSM 7732, FSH 7709 12 (Trails Handbook), Fsh 7109 11a and 11b (Sign Handbook). (62260 (3A)
	04 Manage site use and occupancy to maintain site within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites. (0175) (3A)	
Recreation Management (Private and Other Public Sector)	01 Encourage development of private sector recreation oriented support services. (0161) (3A)	
Wildlife Habitat Improvement and Maintenance	01 Maintain wildlife habitat effectiveness. Permanent openings may be employed. Reduce disturbance to wildlife so that no significant long-term negative wildlife effects result (0155) (3A)	*** a. Work toward a minimum level of 80% habitat effectiveness for elk (9077 GM)
	02 Provide deer and elk cover (6012) (3A)	
Range Resource Management	01 Manage livestock distribution and stocking rates to be compatible with recreation use Locate structural improvements to meet visual quality objectives (0158) (3A)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
	***	
Silvicultural Prescriptions	01 Manage tree stands using both commercial and noncommercial methods Enhance visual quality, diversity, and insect and disease control (3110 GM)	
Special Use Management (Non-Recreation)	01 Permit special uses which are complementary and compatible with the objectives of the management area and which do not change the ROS classification (0395) (3A)	
	02 Permit special uses which are complementary and compatible with the kind and development level of the associated Forest Service facilities within the area (0464) (3A)	a Reference the ROS Users Guide (6230) (3A)
Local Road Construction and Reconstruction	01 Local road may be constructed for non-recreation purposes Close local roads to public motorized use, and prohibit off-road vehicle (ORV) use Maintain local roads to Level 1 during periods when access for resource utilization is not required. (0396) (3A)	
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area (2223GM) (3A)	a. Confine or control wildfires at fire intensity levels I and II. Control all wildfires at fire intensity level III and above (8221GM) (3A)

MANAGEMENT PRESCRIPTION 4B

(Optimize habitat capability for all management indicator species)

Management emphasis is on the habitat needs of one or more management indicator species Species with compatible habitat needs are selected for an area. The goal is to optimize habitat capability, and thus numbers of the species. The prescription can be applied to emphasize groups of species, such as early succession dependent or late succession dependent, in order to increase species *richness or diversity*.

Vegetation characteristics and human activities are managed to provide optimum habitat for the selected species, or to meet population goals jointly agreed to with the State Fish and Wildlife agencies Tree stands are managed for specific size, shape, interspersion, crown closure, age, *structure, and edge contrast* Grass, forb, and browse vegetation characteristics are regulated. Rangeland vegetation is managed to provide needed vegetation species composition and interspersed grass, forb, and shrub sites or variety in age of browse plants Fish habitat improvement treatments are applied to lakes and streams to enhance habitats and increase fish populations

Recreation and other human activities are regulated to favor the needs of the designated species Roaded-natural recreation opportunities are provided along Forest arterial and collector roads Local roads and trails are either open or closed to public motorized travel Semi-primitive motorized recreation opportunities are provided on those local roads and trails that remain open, semi-primitive nonmotorized opportunities are provided on *those that are closed* A *full range* of tree harvest methods and rangeland vegetation treatment methods are available. Investments in other compatible resource uses may occur but will be secondary to habitat requirements Management activities will meet the adopted VQO

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities to blend with the natural landscape. (0332) (4B) 02 Manage for adopted VQO. (2022GM) (4B) 03 Implement visual resource management, as outlines in the Forest Management Requirements. (2023GM) (4B)	
Dispersed Recreation Management	01 Manage human recreational activities so they do not conflict with habitat needs of selected indicator species. (0343) (4B) 02 Semi-primitive nonmotorized, semi-primitive motorized, and roaded natural recreation opportunities can be provided. (2031GM) (4B)	a. Maximum Use and Capacity Levels are, Recreation use and capacity range during the snow-free period (PAOT/acre): Trail use and capacity range (PAOT/mile of trail) Capacity Range Use Level / Very Low / Low / Moderate / High ROS Class - Semi-Primitive Nonmotorized On Trails PAOT/mile: 2.0 / 3.0 / 9 0 / 11 0 Area-wide PAOT/acre: 004 / 008 / 05 / 08 ROS Class - Semi-Primitive Motorized

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Dispersed Recreation Management		On Trails PAOT/mile 2.0 3 0 9.0 11.0 Area-wide PAOT/acre 004 .008 .05 .08 ROS Class - Roaded Natural On Trails PAOT/mile - - - - Area-wide PAOT/acre .04 .08 1.2 2 5 ROS Class - Rural On Trails PAOT/mile - - - - Area-wide PAOT/acre .5 .8 5.0 7.5 Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25 Reduce the above use levels where unacceptable changes to the biophysical resource will occur. (6402) (4B) b Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp 88) (6083) (4B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Dispersed Recreation Management		c See FSM 2331, FSM 7732, FSH 7709 12 (Trails Handbook), FSH 7109 11a and 11b (Sign Handbook) (6226) (4B)
	03 Permit undesignated sites in Frissell condition class through 3 where unrestricted camping is permitted (0174) (4B)	
	04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites (0175) (4B)	
	05 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat. (0154) (4B)	
Wildlife and Fish Resource Management	01 Manage for habitat needs of selected indicator species (3070GM)	a Maintain habitat capability at a level at least 80 percent of potential capability (6261) (4B)
	02 Emphasis on species commonly hunted, fished, or trapped will follow species priorities established by States. (0338) (4B)	a Maintain at least 90 percent of the habitat needed to support the State population goals for each species (6260) (4B)
	03 Maintain hiding cover for elk and deer, where present (0341) (4B)	a. Where the potential exists, maintain cover along 75% of all arterial and collector roads Cover should be located and measured perpendicular to the road with gaps between cover kept to a minimum (9085) (4B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Wildlife and Fish Resource Management		b In diversity unit dominated by forested ecosystems, maintain a minimum of 50 percent of the diversity unit in deer or elk hiding cover. This hiding cover should be well distributed over the unit Maintain 30 percent of the diversity unit in thermal cover (winter or spring- summer). Hiding cover can be used to meet thermal cover requirements if they indeed coincide biologically. (6334) (4B)
Range Resource Management	01 Apply wildlife and livestock forage allowable use guides specified in Forest Direction. Modify so needs of management indicator species are met. (0415) (4B)	a. Maintain vegetation in fair or better range condition. (6172) (4B)
	02 Structural range improvement should be designed to benefit wildlife and livestock (0416) (4B)	a Structural improvements will not adversely affect big game movement (FSH 2209.22) (6247) (4B)
Silvicultural Prescriptions	01 Manage forest cover types to provide variety in stand sizes, shape, crown closure, edge contrast, age contrast, age structure and interspersion (0345) (4B)	
Transportation System Management	01 Manage road use to provide for habitat needs of management indicator species, including road closures and area closures, and to maintain habitat effectiveness. (0342) (4B)	a Determine off-road vehicle restrictions based on the needs of wildlife. Follow ORV Management Guidelines Handbook (R2 FSH 2309.26). (6288) (4B)
	***	***
	02 Manage public motorized use on roads and trails to maintain or enhance effective habitat for elk (3202 GM)	a Work toward a minimum level of 80% habitat effectiveness for elk. (9203 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Fire Planning and Suppression	*** 01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (3222GM)	a. Confine, Contain, or control wildfires at fire intensity levels I, II and III. Control wildfires at fire intensity level IV and above (8222GM) (4B)
Fuel Treatment	01 Maintain Fuel conditions which permit fire suppression and prescribed fire to maintain habitat needed for selected species or species population levels. (0344) (4B)	

*** - Item following *** has been changed from the Original Plan

MANAGEMENT PRESCRIPTION 4D

***

(Emphasis is on Aspen management)

Aspen is managed to produce wood fiber, visual quality and plant and animal diversity while maintaining and improving aspen sites on summer range. (Management on winter range is handled under the prescription area 5B) Aspen dependent non-game, elk, and deer indicator species are emphasized. Aspen is managed to provide a habitat capability greater than or equal to 70 percent of potential

Other tree species, if present, are de-emphasized. Both commercial and noncommercial treatments are applied

Aspen clones are maintained On larger areas, a variety of aspen stand ages, sizes, shapes, and interspersion are maintained Even-aged management is practiced and is achieved by varying the size, age, shape, and interspersion of individual stands Management activities will meet adopted VQO.

Individual treatment area sizes are defined by clone size and economic considerations Clones larger than 40 acres may be treated in accordance with the 60 day review period/Regional Forester approval requirements.

Low standard specified roads and temporary roads are the primary means of accessing areas Some temporary or seasonal road and area use restrictions are implemented to achieve habitat capability goals

Recreational opportunities available are semi-primitive nonmotorized and motorized or roaded natural

Investments in other compatible resources occur Livestock grazing can occur, but is subordinate to wildlife habitat needs and required protection of young aspen needed for regeneration. Range is managed for a fair or better condition and use of transitory range is made to improve livestock distribution.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Diversity on National Forests and National Grasslands	01 Maintain aspen clones (0422) (4D)	
Visual Resource Management	01 Vary location of treated clones to maintain natural-appearing diversity in age classes. (0425) (4D)	
	02 Manage for adopted VQO (2022GM) (4D)	
	03 Implement visual resource management, as outlined in the Forest Management Requirements (2023GM) (4D)	
	04 Emphasize aspen viewing areas (0427) (4D)	
Management of Developed Recreation Sites	01 Prohibit development of new developed recreation sites (0412) (4D)	
Dispersed Recreation Management	01 Manage human recreational activities so they do not conflict with habitat needs of selected indicator species (0343) (4D)	
	02 Semi-primitive nonmotorized, semi-primitive motorized and roaded natural recreation opportunities can be provided (2031GM) (4D)	a Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp. 88) (6083) (4D) b. See FSM 2331, FSM 7732, FSH 7709.12 (Trails Handbook), FSH 7109 11a and 11b (Sign Handbook) (6226) (4D)
Wildlife and Fish Resource Management	01 Manage for habitat needs of indicator species (0408) (4D)	a Maintain big game hiding cover next to aspen viewing areas, and along the edge of arterial and collector roads (6254) (4D)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Wildlife and Fish Resource Management		b Maintain habitat capability at a level at least 70 percent of potential capability for aspen dependent and big game species. (6262) (4D)
	02 Maintain standing dead trees (0490) (4D)	a. Provide snags needed to maintain habitat capability for cavity dependent wildlife at 80 percent or more of potential. (6251) (4D)
	03 Maintain aspen dominance on determinate and indeterminate sites. (0421) (4D)	
Range Resource Management	01 protect aspen regeneration (0423) (4D)	
	02 Maintain mid-seral or better range conditions (0417) (4D)	
Silvicultural Prescriptions	01 Manage aspen forest cover type to perpetuate aspen using even-aged silviculture (0428) (4D)	*** a. Aspen management should be guided by the publication; 1) Apen Ecology and Management in the Western United States edited by Norton V. DeByle and Robert P. Winekur, USDA FS General Technical Report - 119, Rocky Mountain Forest and Range Experiment Station, Ft. Collins, CO, 1985. and 2) "Examples of Aspen Treatment, Succession and Management in Western Colorado", by Johnston and Hendzel, Rocky Mtn Region, 1985. (9110 GM)
Transportation System Management	01 Manage road use to provide for habitat needs of management indicator species, including road closures and area closures, and to maintain habitat effectiveness. (0342) (4D)	a Determine off-road vehicle restrictions based on the needs of wildlife Follow ORV Management Guideline Handbook (R2 FSH 2309 26). (6288) (4D)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Transportation System Management	*** 02 Manage public motorized use on roads and trails to maintain or enhance effective habitat for elk. (3202 GM)	*** a Work toward a minimum level of 60% habitat effectiveness for elk. (9204 GM)
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (3222GM)	a Confine or control wildfires at fire intensity levels I, II and III. Control wildfires at fire intensity level IV and above. (8222 GM) (4D)
Fuel Treatment	01 Apply prescribed burning to regenerate aspen and to benefit wildlife (0433) (4D) 02 Design fuelwood cutting unit boundaries that do not cross adjacent aspen clone boundaries (0482) (4D) 03 Protect snags during fuelwood cutting and prescribed burning. (0483) (4D)	a Allow aspen regeneration to occur naturally (6636) (4D)

MANAGEMENT PRESCRIPTION 5A

(Optimize habitat capability for big game on nonforested winter range)

Management emphasis is on winter range for deer, elk, pronghorns, bighorn sheep, and mountain goats Treatments are applied to increase forage production of existing grass, forb, and browse species or to alter plant species composition Prescribed burning, seed for wildlife and range, spraying, planting, and mechanical treatments may occur. Browse stands are regenerated to maintain a variety of age classes and species

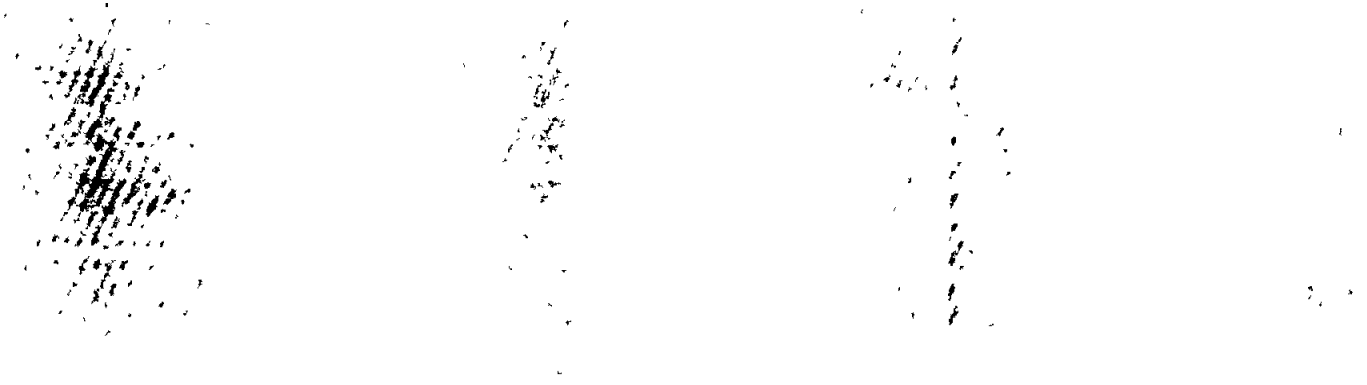
Winter range is managed to produce wildlife habitat capability greater than or equal to 90 percent of potential Range is managed for a mid-seral or better condition

Investments in compatible resource activities occur. Livestock grazing is compatible but is managed to favor wildlife habitat Structural range improvements benefit wildlife. Management activities will meet adopted VQO

New roads other than short-term (temporary) roads are located outside of the management area. Short term roads are obliterated within one season after intended use Existing local roads are closed and new motorized recreation use is managed to prevent unacceptable stress on big game animals during the primary big game use season

II GOALS FROM ORIGINAL PLAN DEVELOPMENT:

-Acquire and protect winter range and unique habitats



MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities to blend with natural landscape. (0332) (5A) 02 Manage for adopted VQO. (2022GM) (5A) 03 Implement visual resource management, as outlined in the Forest Management Requirements. (2023GM) (5A)	
Management of Developed Recreation Sites	*** 01 Design, construct and operate only those developed sites (1A) which are needed to meet summer season management objectives, and are appropriate for the established ROS designation Close all developed sites during the winter management seasons (3030GM)	
Dispersed Recreation Management	01 Manage summer use-season for appropriate ROS opportunities Provide roaded natural recreation opportunities within 1/2 mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public motorized travel Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals within 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use. Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS Class. Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use (0654) (5A)	a Maximum Use and Capacity Levels are: Recreation use and capacity range during the snow-free period (PAOT/acre): Trail use and capacity range (PAOT/mile of trail) Capacity Range Use Level — Very Low — Low — Moderate — High ROS Class - Primitive On Trails PAOT/Mile — 0.5 — 1.0 — 2.0 — 3.0 Area wide PAOT/acre — .001 — .002 — .007 — .025

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Dispersed Recreation Management		ROS Class - Semi-Primitive Nonmotorized On Trails PAOT/mile 2 0 3.0 9 0 11.0 Area-wide PAOT/acre 004 008 05 08 ROS Class - Semi-Primitive Motorized On Trails PAOT/MIle 2.0 3.0 9.0 11 0 Area-wide PAOT/mile .004 .008 .05 08 ROS Class - Roaded Natural On Trails PAOT/Mile - - - - Area-wide PAOT/acre 04 .08 1 2 2 5 Reduce the above use level co-efficients as necessary to reflect usable acres, patterns of use, and general attract-iveness of the specific management area type as described in the ROS Users Guide, Chapter 25 Reduce the above use levels where unacceptable changes to the biophysical resources will occur. (6404) (5A) b Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp. 88). (6083) (5A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Dispersed Recreation Management		c See FSM 2331, FSM 7732, FSH 7709 12 (Trails Handbook), FSH 7109.11a and 11b (Sign Handbook). (6226) (5A) d Prohibit open fires when the occurence of fire rings exceeds Frissell Class 1 site conditions on 10 percent or more of the known campsites (6330) (5A)
	02 Manage winter use for very low or low densities. Close areas to human use to the degree necessary in winter to prevent disturbance of wildlife. (0754) (5A)	a Close management area to cross-country ski trail development and to snowmobile use. (6662) (5A) b Do not provide parking or trail head facilities during winter. (6664) (5A)
Wildlife and Fish Resource Management	01 Provide big-game forage and cover, and habitat (0310) (5A)	a Maintain at least 30 percent of shrub plants in mature age, and at least 10 percent in young stage (6166) (5A) b. Maintain at least two shrub species on shrub lands capable of growing two or more shrub species. (6167) (5A) c Maintain habitat capability at a level at least 80 percent of potential for big game. (6263) (5A)
Range Resource Management	01 Manage grazing to favor big-game and to achieve the wildlife populations identified in state-wide comprehensive wildlife plans. (0315) (5A)	a Maintain vegetation in mid-seral or better range condition (6172) (5A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Range Resource Management		*** b. Limit livestock use of browse and herbaceous plant production to that not needed by big game. Individual allotment management plans, which have the winter range management area prescription designated within the allotment, will reflect livestock use levels to assure adequate quantity and quality of browse and herbaceous vegetation is available for big game during the winter months Coordination with adjacent landowners and/or agencies should be evaluated as a way to accomplish this standard (9092GM)
Special Use Management (Non -Recreation)	01 Eliminate special uses that conflicts with wintering animals (0320) (5A)	
Rights-of-Way and Land Adjustments	01 Acquire private lands needed for big-game winter range (0319) (5A)	
Transportation System Management	01 Road traffic and road cut or fill slopes must not block big game movement in delineated migration routes or corridors (0323) (5A)	
	02 Allow new roads in the management area only if needed to meet priority goals outside tha management area or to meet big game goals on the management area Obliterate temporary roads within one season after planned use ends (0762) (5A)	a New permanent or temporary roads constructed in the management area must meet the following criteria 1) There is no feasible alternative to build the road outside the area, and the road is essential to achieve priority goals and objectives of contiguous management areas, or to provide access to land administered by other government agencies or to contiguous private land

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Transportation System Management		2) The State Fish and Wildlife agency been fully involved in the road location planning and alternative evaluation 3) Planned management of road use during winter will prevent or minimize disturbance of wintering big game animals, or will allow hunting and other management activities needed to meet management objectives. 4) Roads are constructed to the minimum standards necessary to provide safety for the road use purpose 5) Roads cross the winter range in the minimum distance feasible to facilitate the necessary use. 6) Road traffic and road cut or fill slopes must not block big game movements in delineated migration routes or corridors. (6668) (5A)
	*** 03 Manage public motorized use on roads and trails to maintain or enhance effective habitat for elk (3204GM)	*** a Work toward a minimum level of 90% habitat effectiveness for elk. (9205GM)
	*** 04 During winter close existing roads, prohibit off-road vehicle use and manage non-motorized use to prevent stress. (3205GM)	a. Opening of existing roads during winter can be approved if the following criteria are met: 1) There is no reasonable alternative for owners or managers of contiguous private land or public land to reach their lands during winter.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Transportation System Management		2) Road use, off-road vehicle use, or non-motorized use of the area is essential and is the minimum necessary to meet priority resource management goals and objectives. 3) The State Fish and Wildlife Agency is fully involved in planning human use of area during winter (6670) (5A)
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (3222GM)	a. Confine or control wildfires at fire intensity levels I, II and III Control wildfires at fire intensity level IV and above (8222GM) (5A)

*** - Item following *** has been changed from the Original Plan

MANAGEMENT PRESCRIPTION 5B

(Optimize habitat capability for big game on forested winter range.)

Management emphasis is on forage and cover on winter ranges. Winter habitat for deer, elk, bighorn sheep, pronghorn, and mountain goats is emphasized Treatments to increase forage production or to create and maintain thermal and hiding cover for big game are applied Tree stand treatments can be clearcut or shelterwood Commercial and noncommercial stand treatments occur. Specific cover-opening ratios, and stand designs are maintained. Treatments to noncommercial tree species include spraying, burning, falling and mechanical chopping or crushing. A variety of browse age classes are maintained Continuous forest cover is maintained on some sites

Winter range is managed to produce wildlife habitat capability greater than or equal to 90 percent of potential Range is managed for a mid-seral or better condition.

Investments in compatible resources occur. Livestock grazing is compatible but is managed to favor wildlife habitat Structural range improvements benefit wildlife. Management activities will meet adopted VQO.

New roads other than short-term temporary roads are located outside of the management area. Short term roads are obliterated within one season after intended use. Existing local roads are closed and new motorized recreation use is managed to prevent unacceptable stress on big game animals during the primary big game use season

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities to blend with the natural landscape. (0332) (5B) 02 Manage for adopted VQO. (2022GM) (5B) 03 Implement visual resource management, as outlined in the Forest Management Requirements (2023GM) (5B)	
Management of Developed Recreation Sites	01 Design, construct and operate only those developed sites which are needed to meet summer season management objectives, and are appropriate for the established ROS designation Close all developed sites during the winter management season (0652) (5B)	
Dispersed Recreation Management	01 Manage summer use-season for appropriate ROS opportunities Provide roaded natural recreation opportunities within 1/2 mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public motorized travel. Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals within 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use. Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use (0654) (5B)	a Maximum Use and Capacity Levels are: Recreation use and capacity range during the snow-free period (PAOT/acre): Trail use and capacity range (PAOT/mile of trail): Capacity Range Use Level: Very Low | Low | Moderate | High ROS Class - Primitive On Trails PAOT/Mile: 0.5 | 1.0 | 2.0 | 3.0 Area-wide PAOT/acre: .001 | 002 | .007 | 025

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Dispersed Recreation Management		ROS Class - Semi-Primitve Nonmotorized On Trails PAOT/mile 2 0 3.0 9.0 11 0 Area-wide PAOT/Acre .004 .008 .05 08 ROS Class - Semi-Primitive Motorized On Trails PAOT/Mile 2 0 3 0 9.0 11.0 Area-wide PAOT/Acre .004 .008 .05 .08 ROS Class - Roaded Natural On Trails PAOT/Mile - - - - Area-wide PAOT/Acre 04 .08 1.2 2.5 Reduce the above use level co-efficient as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25. Reduce the above use levels where unacceptable changes to the biophysical resources will occur. (6404) (5B) b. Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp. 88). (6083) (5B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Dispersed Recreation Management		c. See FSM 2331, FSM 7732, FSH 7709 12 (Trails Handbook), FSH 7109 11a and 11b (Sign Handbook). (6226) (5B) d. Prohibit open fires when the occurance of fire rings exceeds Frissell Class 1 site conditions on 10 percent or more of the known campsites. (6330) (5B)
	02 Manage winter use for very low or low densities Close areas to human use to the degree necessary in winter to prevent disturbance of wildlife. (0754) (5B)	a Close management area to cross-country ski trail development and to snowmobile use (6662) (5B) b Do not provide parking or trail head facilities during winter. (6664) (5B)
Wildlife and Fish Resource	01 Provide big-game forage and cover, and habitat. (0310) (5B)	a Maintain at least 30 percent of the area in created or natural openings (6177) (5B) b Do not eliminate presence of any browse species (6168) (5B) *** c Maintain, along 75 percent of all arterial and collector road edges that have continuous human use, cover and screens to break up sight distance from the road into areas which are open to roads (9078 GM) (5B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Wildlife and Fish Resource		*** d. In diversity units dominated by forested ecosystems, maintain 30-50 percent of the area in cover This cover should be well distributed over the area. (9079 GM) (5B) e. Maintain habitat capability at a level at least 80 percent of potential capability. (6261) (5B)
Range Resource Management	01 Manage grazing to favor big-game and to achieve the wildlife populations identified in statewide comprehensive wildlife plans (0315) (5B)	a Maintain vegetation in mid-seral or better range condition (6172) (5B) *** b Limit livestock use of browse and herbaceous plant production to that not needed by big game. Individual allotment management plans, which have the winter range management area prescription designated within the allotment, will reflect livestock use levels to assure adequate quantity and quality of browse and herbaceous vegetation is available for big game during the winter months Coordination with adjacent landowners and/or agencies should be evaluated as a way to accomplish this standard (9093GM)
	02 Emphasize intensive management of grazing through use of rotation grazing systems (0316) (5B)	
Silvicultural Prescriptions	01 Manage forest cover types to achieve and maintain desired thermal and hiding cover, cover-opening ratios and other habitat needs associated with tree cover (0324) (5B)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Silvicultural Prescriptions	02 Apply a variety of silvicultural systems and harvest methods which best meet resource management objectives. (0016) (FDR)	*** a Use the following harvest methods at least 80% of the time when applying management to the different forest cover types.
Special Use Management (Non -Recreation	01 Eliminate special uses that conflict with wintering animals (0320) (5B)	

Forest Cover Type	Appropriate Harvest Methods* Even-aged	Uneven-aged
Ponderosa Pine	SW	--
Aspen	CC	--
Lodgepole Pine	CC	--
Engelmann spruce-Subalpine-fir	--	GS & ST
Douglas -fir		
Mistletoe infected Stands - all species	CC	--

* The following abbreviations are used for harvest methods:

SW = Shelterwood
CC = Clearcut
GS = Group Selection
ST = Single tree selection
(9111 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Rights-of-way and Land Adjustments	01 Acquire private lands needed for big-game winter range. (0319) (5B)	
Transportation System Management	01 Road traffic and road cut or fill slopes must not block big game movement in delineated migration routes or corridors (0323) (5B)	
	02 Allow new roads in the management area only if needed to meet priority goals outside the management area or to meet big game goals on the management area Obliterate temporary roads within one season after planned use ends. (0762) (5B)	a New permanent or temporary roads constructed in the management area must meet the following criteria 1) There is no feasible alternative to build the road outside the area, and the road is essential to achieve priority goals and objectives of contiguous management areas, or to provide access to land administered by other government agencies or to contiguous private land 2) The State Fish and Wildlife agency has been fully involved in the road location, planning and alternative evaluation. 3) Planned management of road use during winter will prevent or minimize disturbance of wintering big game animals or will allow hunting and other management activities needed to meet wildlife management objectives 4) Roads are constructed to the minimum standards necessary to provide safety for the road use purpose

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Transportation System Management		5) Roads cross the winter range in the minimum distance feasible to facilitate the necessary use. 6) Road traffic and road cut or fill slopes must not block big game movement in delineated migration routes or corridors (6668) (5B)
	*** 03 Manage public motorized use on roads and trails in combination with hiding and thermal cover and forage to maintain or enhance effective habitat for elk. (3206GM)	*** a. Work toward a minimum level of 80% habitat effectiveness for elk. (9206GM)
	*** 04 During winter close existing roads, prohibit off-road vehicle use and manage non-motorized use to prevent stress. (3207GM)	a. Opening of existing roads during winter can be approved if the following criteria are met: 1) There is no reasonable alternative for owners or managers of contiguous private land or public land to reach their lands during winter. 2) Road use, off-road vehicle use, or non-motorized use of the area is essential and is the minimum necessary to meet priority resource management goals and objectives 3) The State Fish and Wildlife Agency is fully involved in planning human use of area during winter. (6670) (5B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (3222GM)	a. Control wildfires in stands of trees less than 40 years of age Confine or contain wildfires in stands of trees older than 40 years of age at fire intensity levels I and II and control at fire intensity level III and above (8223GM) (5B)

MANAGEMENT PRESCRIPTION 6A

(Improve soil and vegetation condition and provide forage for livestock production)

Management emphasis is on improving soil and vegetation conditions Intensive grazing management is required Condition is improved through use of vegetation and soil restoration practices, improved livestock management, and regulation of other resource activities Investment in structural and nonstructural improvements is moderate to high Structural improvements benefit or at least do not adversely affect wildlife. Conflicts between livestock and wildlife are resolved in favor of livestock Nonstructural restoration and forage improvement practices available are seeding, planting, burning, fertilizing, pitting, furrowing, spraying, crushing and plowing.

Investments are made in compatible resource activities Dispersed recreation opportunities vary between semi-primitive nonmotorized and roaded natural. Management activities are evident but harmonize and blend with natural setting.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities to blend with the natural landscape (0332) (6A)	a When projects require clearing of vegetation and (or) soil disturbance, use irregular clearing edges and shapes to blend with the natural landscapes. (6185) (6A)
	02 Manage for adopted VQO (2022GM) (6A)	
	03 Implement visual resource management, as outlined in the Forest Management Requirements (2023GM) (6A)	
Dispersed Recreation Management	01 Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided (0445) (6A)	
	02 Provide roaded natural recreation opportunities within 1/2 mile of forest arterial, collector and local roads with better than primitive surfaces which are open to public travel Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals within 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use (0650) (6A)	a Maximum Use and Capacity Levels are: Recreation use and capacity range during the snow-free period (PAOT/acre). Trail use and capacity range (PAOT/mile of trail)

Use Level	Capacity Range: Very Low	Low	Moderate	High
ROS Class	– Semi-Primitive Nonmotorized			
On Trails PAOT/mile	2.0	3 0	9 0	11 0
Area-wide PAOT/acre	.004	008	05	08

*** – Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Dispersed Recreation Management		ROS Class - Semi-Primitive Motorized On Trails PAOT/mile 2 0 3 0 9 0 11 0 Area-wide PAOT/acre 004 008 05 .08 ROS Class - Roaded Natural On Trails PAOT/mile - - - - Area-wide PAOT/acre .04 08 1 2 2 5 ROS Class - Rural On Trails PAOT/mile - - - - Area-Wide PAOT/acre 5 8 5.0 a 5 Reduce the above use level co-efficients as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25 Reduce the above use levels where unacceptable changes to the bio-physical resource will occur (6402) (6A) b Specify off-road vehicle restriction based on ORV use management (FSM 2355, R2 Supp. 88). (6083) (6A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Dispersed Recreation Management		c. See FSM 2331, FSM 7732, FSH 7709 12 (Trails Handbook), FSH 7109.11a and 11b (Sign Handbook). (6226) (6A)
	03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted. (0174) (6A)	
	04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites. (0175) (6A)	
	05 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat. (0154) (6A)	
Wildlife and Fish Resource	01 Manage for habitat needs of indicator species. (0408) (6A)	a Maintain capability at 70 percent or more of potential capability (6183) (6A)
	02 Provide adequate forage to sustain big-game population levels agreed to in the Statewide Comprehensive Wildlife Management Plan on NFS lands (0330) (6A)	
Range Resource Management	01 Use only intensive grazing systems or remove livestock when recovery of range condition cannot be accomplished by an intensive grazing system (0325) (6A)	
	02 Improve range conditions to mid-seral or better or forage value rating to moderately high or better. (0326) (6A)	a. Base range condition on the standards in Range Analysis Handbook (FSH 2209.21) (6156) (6A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Range Resource Management	03 Invest in cost-effective allotment management and associated range improvements (0327) (6A)	a Base economic analysis on Project Effectiveness Analysis Handbook (FSH 2209.11). (6290) (6A)
	04 Invest in cost-effective grazing management and rangeland productivity improvements Where improvements include water developments, a water right in the name of the United States must be obtained. (0328) (6A)	a Structural improvements will not adversely affect big-game movement (6182) (6A)
Silvicultural Prescriptions	01 Maintain and manage forested inclusions to provide a high level of forage production, wildlife habitat, and diversity (0333) (6A)	
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (3222GM)	a. Confine or control wildfires at fire intensity levels I, II and III Control wildfires at fire intensity level IV and above. (8222GM) (6A)

MANAGEMENT PRESCRIPTION 6B

(Maintain soil and vegetation condition and provide forage for livestock production.)

The area is managed for livestock grazing. Intensive grazing management systems are favored over extensive systems Range condition is maintained through use of forage improvement practices, livestock management, and regulation of other resource activities Investment in structural and nonstructural range improvements to increase forage utilization is moderate to high. Structural improvements benefit, or at least do not adversely affect wildlife. Conflicts between livestock and wildlife are resolved in favor of livestock. Nonstructural restoration and forage improvement practices available are seeding, planting, burning, fertilizing, pitting, furrowing, spraying, crushing and plowing. Cutting of encroaching trees may also occur

Investments are made in compatible resource activities. Dispersed recreational opportunities vary between semi-primitive nonmotorized and roaded natural. Management activities are evident but harmonize and blend with the natural setting.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities to blend with with the natural landscape. (0332) (6B) 02 Manage for adopted VQO. (2022GM) (6B) 03 Implement visual resource management, as outlined in the Forest Management Requirements. (2023GM) (6B)	
Dispersed Recreation Management	01 Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided. (0445) (6B) 02 Provide roaded natural recreation opportunities within 1/2 mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public travel Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals within 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use. Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class. Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use. (0650) (6B)	a Maximum Use and Capacity Levels are: Recreation use and capacity range *during the snow-free period (PAOT/acre)*: Trail use and capacity range (PAOT/mile of trail) Capacity Range Use Level: Very Low | Low | Moderate | High ROS Class - Semi-Primitive Nonmotorized On Trails PAOT/mile: 2 0 | 3.0 | 9 0 | 11 0 Area-wide PAOT/acre: .004 | 008 | 05 | 08

*** - Item following *** has been changed *from the Original Plan*

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES

CONTINUATION OF:
Dispersed
Recreation
Management

ROS Class - Semi-Primitive Motorized				
On Trails				
PAOT/mile	2 0	3.0	9 0	11.0
Area-wide				
PAOT/acre	.004	.008	05	08
ROS Class - Roaded Natural				
On Trail				
PAOT/mile	-	-	-	-
Area-wide				
PAOT/acre	04	.08	1.2	2.5
ROS Class - Rural				
On Trails				
PAOT/mile	-	-	-	-
Area-wide				
PAOT/acre	.5	.8	5.0	7.5

Reduce the above use level co-efficients as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25

Reduce the above use levels where unacceptable changes to the bio-physical resources will occur.
(6402) (6B)

b. Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp. 88).
(6083) (6B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Dispersed Recreation Management		c. See FSM 2331, FSM 7732, FSH 7709 12 (Trails Handbook), FSH 7109 11a and 11b (Sign Handbook) (6226) (6B)
	03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted. (0174) (6B)	
	04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites (0175) (6B)	
	05 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat (0154) (6B)	
Wildlife and Fish Resource Management	01 Manage for habitat needs of indicator species (0408) (6B)	a Maintain capability at 60 percent of potential capability (6186) (6B)
	02 Provide adequate forage to sustain big-game population levels agreed to in the Statewide Comprehensive Wildlife Management Plan on NFS lands (0330) (6B)	a Allocate no more than 80 percent of available forage to livestock. (6187) (6B)
Range Resource Management	01 Use only intensive grazing systems or remove livestock when recovery of range condition cannot be accomplished by an intensive grazing system. (0325) (6B)	
	02 Improve range condition to mid-seral or better or forage value rating to moderately high or better. (0326) (6B)	a Base range condition on the standards in Range Analysis Handbook (FSH 2209.21) (6156) (6B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Range Resource Management	03 Invest in cost-effective allotment management and associated range improvements (0327) (6B)	a. Base economic analysis on Project Effectiveness Analysis Handbook (FSH 2209.11). (6290) (6B)
	04 Invest in cost-effective grazing management and rangeland productivity improvements. Where improvements include water developments, a water right in the name of the United States must be obtained. (0328) (6B)	a Structural improvements will not adversely affect big-game movement (6182) (6B)
Silvicultural Prescriptions	01 Maintain and manage forested inclusions to provide a high level of forage production, wildlife habitat, and diversity (0333) (6B)	
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (3222GM)	a Confine, contain or control wildfires at fire intensity levels I, II and III. Control wildfires at fire intensity level IV and above (8222GM) (6B)

MANAGEMENT PRESCRIPTION 7A

(Provide for even aged sawtimber production on slopes less than 40%)

Management emphasis is on wood-fiber production and utilization of large roundwood of a size and quality suitable for sawtimber. *Engelmann spruce-subalpine fir clearcuts are less than 5 acres in size to promote natural regeneration.*

The area generally will have a mosaic of fully stocked stands that follow natural patterns and avoid straight lines and geometric shapes Management activities are not evident or remain visually subordinate along Forest arterial and collector roads and primary trails. Management Activities will meet the adopted VQO

Roaded-natural recreation opportunities are provided along Forest arterial and collector roads. Semi-primitive motorized recreation opportunities are provided on those local roads and trails that remain open Semi-primitive nonmotorized opportunities are provided on those that are closed

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	(01 Meet stated visual quality objective. (0125) (7A) 02 Manage for adopted VQO. (2022GM) (7A) 03 Implement visual resource management, as outlined in the Forest Management Requirements. (2023GM) (7A)	
Dispersed Recreation Management	01 Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided. (0445) (7A) 02 Provide roaded natural recreation opportunities within 1/2 mile of Forest Arterial, collector and local roads with better than primitive surfaces which are open to public travel Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals within 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use. Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS Class. Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use. (0650) (7A)	a Maximum Use and Capacity Levels are. Recreation use and capacity range during the snow-free period (PAOT/acre) Trail use and capacity range (PAOT/mile of trail): Capacity Range Use Level: Very Low; Low; Moderate; High ROS Class - Semi-Primitive Nonmotorized On Trails PAOT/mile: 2.0; 3 0; 9 0; 11 0 Area-wide PAOT/acre: .004; 008; 05; 08

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES

CONTINUATION OF.
Dispersed
Recreation
Management

ROS Class - Semi-Primitive Motorized				
On Trails PAOT/Mile	2.0	3 0	9.0	11.0
Area-wide PAOT/Acre	.004	.008	.05	08
ROS Class - Roaded Natural				
On Trails PAOT/Mile	-	-	-	-
Area-wide PAOT/Acre	.04	.08	1.2	2 5
ROS Class - Rural				
On Trails PAOT/Mile	-	-	-	-
Area-wide PAOT/Acre	5	.8	5.0	7 5

Reduce the above use level co-efficients as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25.

Reduce the above use levels where unacceptable changes to the bio-physical resources will occur.
(6402) (7A)

b. Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp 88).
(6083) (7A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Dispersed Recreation Management		c See FSM 2331, FSM 7732, FSH 7709.12 (Trails Handbook), FSH 7109.11a and 11b (Sign Handbook). (6226) (7A)
	03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted (0174) (7A)	
	04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites (0175) (7A)	
	05 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or specific wildlife habitat. (0154) (7A)	
Wildlife and Fish Resource Management	01 Manage for habitat needs of indicator species (0408) (7A)	
Range Improvements and Maintenance	01 Utilize transitory forage that is available where demand exists, and where investments in regeneration can be protected. (0132) (7A)	a. Vary utilization standards with grazing system and ecological condition. Specify standards in the allotment management plan. (6071) (7A) b. Maximum grazing use on transitory ranges resulting from clearcuts is: -- Key shrubs 20% of current growth. -- Key grasses 40-50% of current growth. -- Key forbs 20% of total production. (6072) (7A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Range Improvments	02 Protect regeneration from livestock damage (0133) (7A)	
Silvicultural Prescriptions	01 See Forest Direction (3100 GM).	
Transportation System Management	01 Locate, survey and design roads for timber management (2207GM) (7A)	
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (3222GM)	Control wildfires in stands of trees less than 40 years of age. Confine or contain wildfires in stands of trees older than 40 years of age at fire intensity levels I and II and control ar fire intensity level III and above (8223GM) (7A)

MANAGEMENT PRESCRIPTION 8A

(Provides for pristine wilderness opportunities)

Management emphasis is for the protection and perpetuation of essentially pristine bio-physical conditions and a high degree of solitude for both wildlife and humans with no perceptible evidence of past human use

All resource management activities are integrated in such a way that evidence of current human use, including permitted and recreation livestock, is not noticeable the following season, or so that natural biological processes are not adversely or artificially changed over time by human use.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities to maintain a pristine ecosystem (0218) (8A)	a The Adopted Visual Quality Objective (VQO) is Preservation. (6132) (8A)
Dispersed Recreation Management	01 Provide opportunities for primitive and unconfined recreation featuring solitude and to travel cross-country in and environment where success or failure is directly dependent on ability, knowledge and initiative. (0223) (8A)	
	02 Emphasize recreation opportunities on the most primitive end of the recreation opportunity spectrum Manage use to provide very infrequent contact with other groups or individuals. (0224) (8A)	a Maximum use and capacity levels are. - Trail and camp encounters during peak use days are less than 2 other parties per day - Trail and area-wide use capacity. (01) Open lands, meadow and alpine 0.003 to 0 007 PAOT per acre (02) Forested lands and shrub lands 0.003 to 0 007 PAOT per acre. - Reduce the above use levels where unacceptable changes to the biophysical resources are likely to occur (6128) (8A)
	03 Limit specially permitted parties to not more than one per 2500 acres. (0226) (8A)	
	04 Prohibit open fires in alpine, krummholz, meadow areas and within riparian areas when: a Use of dead and down wood for fuel is likely to violate diversity requirements, soil nutrient and erosion protection, or b Visual resource objectives for the area likely could not be met (0199) (8A)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Dispersed Recreation Management	05 Prohibit open fires when occurrence of fire-rings exceed Frissell class 1 site conditions on 10 percent or more of the known campsites within the management area (0251) (8A)	a Provide Frissell condition classes 1 and 2 campsites only (6133) (8A)
Recreation Management (Private and Other Public Sector)	01 Manage outfitter-guide operations in the same manner as other visitors Permit camping only in sites specified in outfitter-guide permits. Keep outfitter-guide activities harmonious with activities of non-guided visitors Include outfitter-guide operations in calculations of level-of use capacities. (0208) (8A)	
Wildlife and Fish Resource Management	01 Manage human activity so that wildlife and plant species population dynamics and distribution occurs naturally Prohibit fish stocking except for reintroduction of indigenous species or where stocking has been previously authorized and practiced. (0220) (8A)	
Range Resource Management	01 Manage livestock and herbivorous wildlife forage use in accordance with FSM 2320.3 (36 CFR 293 7). (0182) (8A)	a. Follow established utilization standards for areas, within grazing allotments. (6130) (8A) b. Limit utilization of forage to not more than 30 percent of current annual growth outside established allotments. (6342) (8A) c Limit trampling of forage to not more than 40 percent of current annual herbaceous vegetation growth, outside established allotments. (6344) (8A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Soil Resource Management	01 Restore soil disturbances caused by human use (past mining, grazing, trail construction and use, camping, etc) to soil loss tolerance levels commensurate with the natural ecological processes for the treatment area (0184) (8A)	a Follow procedures specified in Agricultural handbook 537 for Utilizing the Universal Soil Loss Equation. (Cautions contained in WO 2550 letter dated 5/28/82 should be noted) The guidance for K and T factors are in the National Soils Handbook 407 1 (a) (3) (XVII). (6159) (8A) b. Provide Frissell condition classes 1 and 2 campsites only (6133) (8A)
Trail Construction and Reconstruction	01 Do not construct or reconstruct trails. (0228) (8A)	
FA&O Construction Reconstruction and Maintenance	01 Prohibit man-made structures and facilities (0219) (8A)	

MANAGEMENT PRESCRIPTION 8B

(Provides for primitive wilderness opportunities)

Management emphasis is to provide for the protection and perpetuation of natural biophysical conditions On-site regulation of recreation use is minimal. Travel is cross-country or by use of a low-density constructed trail system.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities so that the impact of man is not apparent and the area appears in a condition affected only by natural biotic succession (0230) (8B)	a The Adopted Visual Quality Objective (VQO) is Preservation (6132) (8B)
Dispersed Recreation Management	01 Emphasize primitive recreation opportunities requiring a high degree of isolation, solitude, self-reliance and challenge while traveling cross-country or on system trails (0231) (8B)	
	02 Prohibit open fires in alpine, krummholz, meadow areas and within riparian areas when: a Use of dead and down wood for fuel is likely to violate diversity requirements, soil nutrient and erosion protection, or b. Visual resource objectives for the area likely could not be met. (0199) (8B)	
	03 Manage use to provide a low incidence of contact with other groups or individuals and to prevent unacceptable, changes to the biophysical resources (0301) (8B)	a. Maximum use and capacity levels are: - Trail and camp encounters during peak use days are less than 6 other parties per day. - Trail and area-wide use capacity: Use Level: On Trails PAOT/Mile — Open Lands: 0.5-1.0 — Forest & Shrub Lands: 2-3 (6372) (8B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Dispersed Recreation Management		b. Area-wide Capacity: (PAOT/Acre) Open Lands Alpine, Krummholz 002 Rock, Mtn. grass .005 Forest and Shrub Lands Ponderosa Pine, Douglas-fir, Riparian areas, White Pine .01 Spruce-Fir, Lodgepole Pine, Aspen .02 (6336) (8B)
		c. Reduce visitor use when the level of use exceeds capacity on more than 10 percent of the days during summer and fall use season. (6374) (8B)
	04 Manage sites to provide opportunity for moderate to high degree of solitude. (0626) (8B)	a. Use a minimum site spacing of 500 feet. (6338) (8B)
		b. Occupied site guidelines: (Maximum number of sites occupied at one time.) Lakes <5 acres 2 5-25 acres 3 >25 acres 4 Depending on site suitability/ availability Streams and Trails Open areas 2 Sites/mile Forested areas 4 sites/mile (6340) (8B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Recreation Management (Private and Other Public Sector)	01 Manage outfitter-guide operations in the same manner as other visitors. Permit camping only in sites specified in outfitter-guide permits. Keep outfitter-guide activities harmonious with activities of non-guided visitors Include outfitter-guide operations in calculations of level-of-use capacities (0208) (8B)	
Range Resource Management	01 Manage livestock and herbivororous wildlife forage use in accordance with FSM 2320 3 (36 CFR 293 7) (0182) (8B)	a Follow established utilization standards for areas, within grazing allotments (6130) (8B)
Special Use Management (Non -Recreation)	01 Manage surface occupancy activities authorized prior to wilderness designation to reduce impact on wilderness values consistent with the intent of the occupancy authorization. (0210) (8B)	
Soil Resource Management	01 Restore soil disturbances caused by human use (past mining, grazing, trail construction and use, camping, etc) to soil loss tolerance levels commensurate with the natural ecological processes for the treatment area. (0184) (8B)	a Follow procedure specified in Agricultural Handbook 537 for Utilizing the Universal Soil Loss Equation (Cautions contained in WO 2550 letter dated 5/28/82 should be noted) The guidance for K and T factors are in the National Soils Handbook 407 1 (a) (3) (xvii). (6159) (8B) b Provide Frissell condition classes 1 and 2 campsites only. (6133) (8B)
Transportation System Management	01 Locate and design required access roads within the management area for authorized activities to minimize the biophysical and visual impact, and to facilitate restoration (0213) (8B)	a Roads will not be authorized - On slopes steeper than 60%, - In areas of high erosion hazard, - In area of High geologic hazard; - In areas of low visual absorption capacity that are unlikely for successful restoration,

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Transportation System Management		- In areas which would adversely effect threatened and endangered plant and animal species. (6165) (8B)
	02 Convert roads not needed for authorized activities to trails, or if they are not needed as part of the transportation systems, restore them to the established VQO (0254) (8B)	a. Maintain trails in accordance with standards in the Trail Handbook (FSH 7709.12). (6129) (8B) b Schedule trail maintenance in accordance with Regional Acceptable Work Standards. (FSM 1310 R2 ID No 1 7/22/82.) (6131) (8B)
	03 Construct or reconstruct trails only when needed to meet objectives of the wilderness transportation system (0255) (8B)	a Follow standards specified in FSH 7709.12, FSM 2323.11c and 2323 61d w/R-2 Supplement. (6134) (8B) b Trail density will be less than one mile per square mile Trails are constructed and maintained for established capacity levels (6161) (8B)
	04 Construct bridges to only the standards necessary to accommodate the specified class of user. Construct bridges only where no safe opportunity exists to cross a stream or gorge during periods of normal stream flow. A safety hazard is a physical condition of a trail which may cause injury, is unusual or unexpected, and not readily identifiable by the trail user. It is not a condition which is easily identifiable and normally encountered for the type or location of the trail involved. The following examples illustrate this distinction:	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Transportation System Management	A hazard is a rotten bridge decking or handrail. A stream crossing where no bridge is provided and the user would expect this on the type and location of the trail is not a hazard A hazard is a stable-appearing loose rock in a constructed treadway where all other rocks are stable. A trail treadway made up of rocks in a near-natural position, many of which are loose, is not a hazard. A hazard is a perennial bog-hole on a horse trail. An intermittent bog-hole which will dry up by early summer or within a few days following a rain storm is not a hazard. A hazard is a section of trail treadway supported by rotten cribbing. A section of trail where the treadway is obviously slippery is not a hazard. A hazard is a marked ford with holes deeper than the normal channel. A deep ford with a consistent stream bed is not a hazard (0214) (8B) 05 Use corduroy and/or puncheon treads across bogs where no safe and feasible bypass opportunity exists. (0215) (8B) 06 Close or sign system when not maintained to the safe standard for the specified use. (0216) (8B)	a. Maintain trails in accordance with standards in the Trail Handbook (FSH 7709.12). (6129) (8B) a. Follow standards specified in FSH 7109.11a and 11b. (6158) (8B)
	07 Use signs of unstained wood with routed letters and mounted on unstained posts. (0249) (8B) 08 Provide signs at trail terminals and trail junctions only. Include only trail identification and identification of terminal points. (0250) (8B)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
FA&O Construction Reconstruction and Maintenance	01 Prohibit construction of new administrative facilities or structures In the event a substantial portion of the existing administrative facility and/or structure is destroyed it will not be replaced. (0207) (8B)	

MANAGEMENT PRESCRIPTION 8C

(Provides for semi-primitive wilderness opportunities.)

Management emphasis is to provide for the protections and perpetuation of essentially natural bio-physical conditions. Solitude and a low level of encounters with other users or evidence of past use is not an essential part of the social setting. Human travel is principally on system trails. Designated campsites are used and show evidence of repeated, but acceptable levels of use.

All resource management activities are integrated in such a way that current human use leaves only limited and site specific evidence of their passing. Areas with evidence of unacceptable levels of past use are rehabilitated and the affected area restored. Range allotments with authorized permanent structures and authorized mineral exploration activities inquiring multi-year surface occupancy facilities may be present within the area. Scientific and other authorized practices utilizing non-motorized equipment, but requiring up to season-long occupancy, are compatible

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Manage for maximum retention of the natural landscape. Design and locate management activities to meet the Visual Quality Objective of Preservation in all areas except where specific surface occupancy is authorized by Wilderness Objective is Retention (0173) (8C)	
Dispersed Recreation Management	01 Provide semi-primitive recreation opportunities requiring predominately unmodified natural settings, with a moderate to high degree of challenge and risk while traveling cross-country or on trails (0237) (8C)	
	02 Prohibit open fires in alpine, krummholz, meadow areas and within riparian areas when: a. Use of dead and down wood for fuel is likely to violate diversity requirements, soil nutrient and erosion protection, or b. Visual resource objectives for the area likely could not be met (0199) (8C)	
	03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted. (0174) (8C)	
	04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites (0175) (8C)	
	05 Manage summer use to allow moderate to high contact with other groups and individuals (0752) (8C)	a. Areawide Capacity: (PAOT/Acre) Open Lands Alpine, Krummholz 004 Rock, Mtn grass .008

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Dispersed Recreation Management		Forest and Shrub Lands Ponderosa Pine, Douglas-fir, Riparian areas, White Pine .05 Spruce-fir, Lodgepole Pine, Aspen .08 (6126) (8C) b Maximum use and capacity levels are. - Trail and camp encounters during peak use days are less than 20 other parties per day. - Trail capacity is displayed below: Use Level / Open Lands / Forest & Shrub lands On Trails (PAOT/Mile) / 2-3 / 9-11 (6346) (8C) c. Reduce visitor use when the level of use exceeds capacity on more than 20 percent of the days during the summer use season (6019) (8C)
06 Reduce visitor use when the level of use exceeds capacity for more than 20 percent of the summer use season (0489) (8C)		
07 Permits for parties larger than the established limit may be issued when their presence can be adequately screened from the sights and sounds of other parties in the area. (0302) (8C)		
08 Manage location of campsites to provide a moderate degree of solitude (0628) (8C)		a. Locate campsites at least 300' apart. (6348) (8C)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Dispersed Recreation Management		b. Occupied Site Guidelines: (Maximum number of sites occupied at one time) Lakes <5 acres 2 5-25 acres 3 >25 acres 4 Streams Open areas 3 sites/mile Forested areas 6 sites/mile (6350) (8C)
	09 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4 (0636) (8C)	a Allow sites to be occupied 20 days summer season or to the level required to maintain at least a stable trend in site condition (6352) (8C) b. Close and restore Frissell condition class 4 sites unless a designated site Close and restore class 5 sites. (6354) (8C)
Recreation Management (Private and Other Public Sector)	01 Manage outfitter-guide operations in the same manner as other visitors Permit camping only in sites specified in outfitter-guide permits Keep outfitter-guide activities harmonious with activities of non-guided visitors Include outfitter-guide operations in calculations of level-of-use capacities (0208) (8C)	
Range Resource Management	01 Manage livestock and herbivorous wildlife forage use in accordance with FSM 2320 3 (36 CFR 293.7). (0182) (8C)	a Follow established utilization standards for areas, within grazing allotments (6130) (8C)
Special Use Management (Non -Recreation)	01 Manage surface occupancy activities authorized prior to wilderness designation to reduce impact on wilderness values consistent with the intent of the occupancy authorization (0210) (8C)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Soil Resource Management	01 Restore soil disturbance caused by human use (past mining, grazing, trail construction and use, camping, etc.) to soil loss tolerance levels commensurate with the natural ecological processes for the treatment area. (0184) (8C)	a Follow procedures specified in Agricultural Handbook 537 for Utilizing the Universal Soil Loss Equation (Cautions contained in WO 2550 letter dated 5/28/82 should be noted.) The guidance for K and T factors are in the National Soils Handbook 407 1 (a) (3) (xvii) (6159) (8C)
Transportation System Management	01 Locate and design required access roads within the management area for authorized activities to minimize the biophysical and visual impact, and to facilitate restoration. (0213) (8C)	a Roads will not be authorized· - On slopes steeper than 60%, - In areas of high erosion hazard, - In areas of high geologic hazard, - In areas of low visual absorption capacity that are unlikely for successful restoration, - In areas which would adversely effect threatened and endangered plant and animal species (6165) (8C 0
	02 Convert roads not needed for authorized activities to trails, or if they are not needed as part of the transportation system, restore them to the established VQO (0254) (8C)	a Maintain trails in accordance with standards in the Trail Handbook (FSH 7709 12). (6129) (8C) b Schedule trail maintenance in accordance with Regional Acceptable Work Standards. *(FSM 1310 R2 ID No. 1 7/22/82* (6131) (8C)
	03 Construct or reconstruct trails only when needed to m meet objectives of the wilderness transportation system (0255) (8C)	a Follow standards specified in FSH 7709 12, FSM 2323.11c and 2323 61d w/R-2 Supplement. (6134) (8C) b *Trail density will not exceed two* miles per square mile Trails are constructed and maintained for moderate to high levels of use as specified below. (6162) (8C)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Transportation System Management	04 Construct bridges to only the standard necessary to accommodate the specified class of user. Construct bridges only where no safe opportunity exists to cross a stream or gorge during periods of normal stream flow. A safety hazard is a physical condition of a trail which may cause injury, is unusual or unexpected, and not readily identifiable by the trail user. It is not a condition which is easily identifiable and normally encountered for the type or location of the trail involved The following examples illustrate this distinction: A hazard is a rotten bridge decking or handrail. A stream crossing where no bridge is provided and the user would expect this on the type and location of the trail is not a hazard A hazard is a stable-appearing loose rock in a constructed treadway where all other rocks are stable. A trail treadway made up of rocks in a near-natural position, many of which are loose, is not a hazard. A hazard is a perennial bog-hole on a horse trail. An intermitten bog-hole which will dry up by early summer or within a few days following a rain storm is not a hazard. A hazard is a section of trail treadway supported by rotten cribbing A section of trail where the treadway is obviously slippery is not a hazard. A hazard is a marked ford with holes deeper than the normal channel. A deep ford with a consistent stream bed is not a hazard. (0214) (8C) 05 Use corduroy and/or puncheon treads across bogs where no safe and feasible bypass opportunity exists. (0215) (8C) 06 Close or sign system trails when not maintained to the safe standard for the specified use (0216) (8C)	a Maintain trails in accordance with standards in the Trail Handbook (FSH 7709.12). (6129) (8C)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Transportation System Management	07 Use signs of unstained wood with routed letters and mounted on unstained posts. (0249) (8C)	a. Follow standards specified in FSH 7109 11a and 11b (6158) (8C)
	08 Provide signs at trail terminals and trail junctions only Include only trail identification and identification of terminal points. (0250) (8C)	
FA&O Construction Reconstruction and Maintenance	01 Prohibit construction of new administrative facilities or structures. In the event a substantial portion of the existing administrative facility and/or structure is destroyed, it will not be replaced (0207) (8C)	

MANAGEMENT PRESCRIPTION 9A

(Provide for an upper mid-seral self perpetuating plant community. Meet established water quality standards)

I 9A - Emphasis is on the management of all of the components of the Aquatic/Riparian ecosystems These components include the stream channel ecosystem, the riparian vegetative ecosystems, and adjacent transitional ecosystems that are closely associated with the aquatic/riparian system The width of these systems varies considerably, and extends outwardly on either side of perennial, intermittent and ephemeral streams, lakes and reservoirs The riparian ecosystem usually extends at least 100 feet from the aquatic feature and can include the flood plain (100 year event) depending on the management activity.

The goals for riparian area management are to manage the vegetation to protect the soil and water resources and to provide the following healthy, self-perpetuating plant communities, acceptable water quality standards, habitats for viable populations of fish and wildlife, and stable stream channels and still water-body shorelines. The aquatic ecosystem may contain, fisheries habitat improvement and channel stabilizing facilities that harmonize with the visual setting and maintain or improve fish and wildlife habitat requirements.

Forest riparian ecosystems are treated to improve wildlife and fish habitat diversity through specific objectives Both commercial and noncommercial vegetation treatments are used to achieve multi-resource benefits Clearcutting is used to regenerate aspen clones. Other forest cover types are treated with either small-group or single-tree selection methods.

Livestock grazing is at a level that will assure maintenance of the vigor and regenerative capacity of the riparian plant communities and the integrity of stream channel characteristics Vehicular travel is limited on roads and trails at times when the ecosystems would be unacceptably damaged. Developed recreation facility construction for overnight use is prohibited within the 100-year floodplain or the riparian system, whichever distance is greatest
Riparian areas are inclusions in other management areas and will be site specifically identified and mapped as part of the NEPA process or during riparian area inventories. The goals listed in this prescription apply to the riparian areas themselves and are in addition to the general directions and standards and guidelines for the MA in which the riparian area is located. How activities are modified in riparian systems may vary depending on whether this zone includes a perennial, intermittent or ephemeral stream. Standards and Guidelines for management activities in the riparian prescription apply to the following prioritized emphasis areas:

1 Perennial streams, lakes, and reservoirs which support a fishery and/or a municipal water supply

2. Domestic water supplies.

3 Perennial streams, lakes and reservoirs which do not support a fishery or are a domestic water supply

4. Intermittent streams with the potential, through improved management activities to become perennial streams.

In cases of resource conflicts, preferential consideration will be given to riparian area resources over other resources with in the management unit.

Standards and Guidelines may or may not apply to emphemeral streams, seeps, springs, bogs, or developed livestock water, dependent upon site specific objectives.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Design and implement management activities which sustain inherent visual values of riparian areas and blend with the surrounding natural landscapes (0656) (9A)	a. Do not exceed an Adopted Visual Quality Objective (VQO) of Partial Retention. (6135) (9A)
Dispersed Recreation Management	01 Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided. (0445) (9A)	
	02 Provide roaded natural recreation opportunities within 1/2 mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public travel. Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals within 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class. Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use. (0650) (9A)	a. Maximum Use and Capacity Levels are. Recreation use and capacity range during the snow-free period (PAOT/Acre): Trail use and capacity range (PAOT/Mile of trail): Capacity Range Use Level / Very Low / Low / Moderate / High ROS Class - Semi-Primitive Nonmotorized On Trails PAOT/Mile: 2 0 / 3 0 / 9.0 / 11 0 Area-wide PAOT/Acre: 004 / 008 / 05 / 08 ROS Class - Semi-Primitive Motorized On Trails PAOT/Mile: 2.0 / 3 0 / 9 0 / 11 0 Area-wide PAOT/Acre: .004 / 008 / 05 / 08

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES

CONTINUATION OF:
Dispersed
Recreation
Management

ROS Class - Roaded Natural				
On Trails PAOT/Mile	-	-	-	-
Area-wide PAOT/Acre	.04	.08	1.2	2.5
ROS Class - Rural				
On Trails PAOT/Mile	-	-	-	-
Area-wide PAOT/Acre	.5	8	5 0	7 5

Reduce the above use level co-efficients as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25.

Reduce the above use levels where unacceptable changes to the biophysical resources will occur.
(6402) (9A)

b *Specify off-road vehicle restrictions* based on ORV use management (FSM 2355, R2 Supp. 88)
(6083) (9A)

c. See FSM 2331, FSM 7732, FSH 7709 12 (Trails Handbook), FSH 7109 11a and 11b (Sign Handbook)
(6226) (9A)

03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted
(0174) (9A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Dispersed Recreation Management	04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites (0175) (9A)	
	05 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat. (0154) (9A)	a Prohibit the use of ORV's within the aquatic/riparian corridor, except where designated roads and trails are established or approved This area extends for 100 feet on either side of the stream channel, or for the width of the riparian area as defined by the vegetative community, whichever distance is greatest
	06 Harden, or close to recreation use, access points to mitigate sediment production Recreation access points would include, but are not limited to day-use parking, fisherman parking, boat ramp, boat access or trailhead sites adjacent to Riparian areas. (3031GM)	
	07 Discourage dispersed recreation camping that will encroach on aquatic and riparian systems.	
	***	
Management of Developed Recreation Sites	01 Prohibit overnight developed campground sites within the riparian corridor Maintain existing campgrounds in a manner so as to protect and preserve riparian and aquatic quality and to protect the life and property of campground users (3032 GM) (9A)	
	***	***
Wildlife & Fisheries Resources Management	01 Provide habitat diversity through vegetation treatments, in conjunction with other resource activities, designed to maintain or improve the riparian habitat Provide habitat diversity for viable populations of all native vertebrate species of fish and wildlife in conjuntion with other resource activities. (3071 GM)	a Vegetative treatments, such as prescribed burning, may be permitted on a case-by-case basis if they are consistant with aquatic/riparian habitat management objectives. (9080 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Wildlife & Fisheries Resources Management		*** b. Maintain riparian vegetation communities by protecting overhanging stream cover which provides stream shading, temperature control, and organic input. (9081 GM)
		*** c. Degraded streambanks will be improved through vegetative management with the goal that the total length of the riparian zone will be maintained in stable condition. (9082 GM)
	02 Manage riparian areas to reach the latest seral stage possible within the stated objectives (0402) (9A)	a Maintain all riparian ecosystems in at least an upper mid-seral successional stage based upon the R2 Riparian Ecosystem Rating System (6147) (9A)
		b Stream channel stability will be maintained at a level consistent with an upper mid-seral successional stage for riparian systems (9086)
		c Initiate inventories to gather baseline data on riparian systems using the R-2 riparian scorecard methodology and relate these values to aquatic habitat inventory results (9087 0
Range Resource Management	01 Maintain proper stocking and livestock distribution to protect riparian ecosystems. (0666) (9A)	*** a. Review and update allotment management plans to establish allowable use criteria, vegetative condition and trend that are consistent with objectives to improve and enhance riparian and aquatic ecosystems. (9094 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Range Resource Management		*** b. Seasonal extensions may be considered only when riparian areas not in satisfactory condition would not be utilized or where grazing is being used to accomplish vegetative objectives. (9095 GM) *** c Forage utilization in riparian areas will be consistent with the maintenance and improvement of riparian areas (9096 GM) *** d. Enhance livestock distribution by planning improvements that will draw livestock out of riparian areas susceptible to grazing damage Locate all range improvements (seeding, fencing, etc) to avoid livestock concentrations (bottle-necks) in riparian zones and to discourage or prevent livestock use of prohibited segments of riparian areas (9097 GM) *** e Prohibit livestock salting within riparian areas Individual Allotment Management Plans and/or Annual Plans of Use may specify minimum distances that salt may be placed from riparian zones Livestock salting should be used as a tool to encourage movement or distribution of cattle away from the riparian zone and should normally be located at least 1/4 mile from the riparian zone. (9098 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Range Resource Management		*** f. Adjust opening and closing dates on grazing allotments where early or late grazing of riparian ecosystems results in a riparian vegetative community below the "Upper Mid-Seral" successional stage, or where grazing use is determined to be detrimental to other riparian objectives. (9099 GM)
		*** g Manipulate season of use and/or class of livestock to protect, enhance or improve riparian habitat. Consider riparian condition, soil moisture, and channel stability as criteria, along with vegetative development, to determine "on-dates" and "off-dates" for livestock. (9300 GM)
	*** 02 Manage livestock trailing to protect riparian and aquatic systems (3081 GM)	*** a When trailing is allowed, consider impacts on the riparian vegetative community, and establishing specific trailing dates (9301 GM)
		*** b Prohibit trailing of livestock along the length of riparian areas except where driveways currently exist and resource damage is not occurring (9302 GM)
		*** c. Rehabilitate existing stock driveways where riparian resource damage has occurred. No new stock driveways will be allowed in riparian areas except at suitable locations for crossings. (9303 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Silvicultural Prescriptions	01 Manage forest cover types to perpetuate tree cover and provide healthy stands, high water quality and wildlife and fish habitat. Sensitive areas include bogs and wet meadows and are often characterized by recognizable soils and distinctive vegetation which are saturated at least seasonally. The rotation ages for trees within riparian areas will usually exceed the normal rotation ages. (3111GM)	*** a. Use the following harvest methods at least 80% of the time when applying management to the different forest cover types.

Forest Cover Type	Appropriate Harvest Methods*	
	Even-aged	Uneven-aged
Ponderosa Pine	SW	--
Aspen	CC	--
Lodgepole Pine	__	ST
Engelmann spruce-Subalpine-fir	--	GS & ST
Douglas -fir		
Mistletoe infected Stands - all species	CC	--

* The following abbreviations are used for harvest methods

SW = Shelterwood
CC = Clearcut
GS = Group Selection
ST = Single tree selection
(9112GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Silvicultural Prescriptions	*** 02. Harvest decisions for riparian and sensitive areas will be based on site specific considerations of old growth, habitat, stream temperatures, cover and condition, organic input, bank stability, wildlife cover, log size for recruitment, soil type, reducing the frequency of entries, and visual requirements. (3112 GM)	*** a Limit yarding, skidding of logs or tracking within, through or across the riparian/aquatic corridor Any areas denuded of vegetative cover from harvest activities will be revegetated with the objective of providing ground cover by the following growing season (9113 GM) *** b Regeneration of cutover acres may include planting of deciduous species (9114 GM) *** c. Harvest techniques, such as whole tree removal, may be used to reduce channel debris jam potential (9115 GM) *** d Dozer scarification is not permitted within the riparian system unless the results can be shown to be an enhancement of the riparian area. (9116 GM) *** e. Debris jam potential can be reduced by cutting stumps to near ground level (9117 GM) *** f. Prohibit log landing and decking areas within the stream/riparian corridor. (9118 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Silvicultural Prescriptions		*** g. Removal of large healthy trees within riparian area will be addressed in the project level analysis. (9400 GM)
	*** 03 Harvest activities on frozen ground or snow will be favored unless other methods will create less resource damage (3113 GM)	*** h. Maintain at least 80 percent of existing plant density within 100 ft. from the edges of all perennial streams, lakes and other waterbodies, or to the outer margin of the riparian ecosystems, where wider than 100 feet (GM)
Water Resource Improvement and Maintenance	*** 01 Conduct appropriate water quality monitoring during ground disturbing activities to insure that non-point sources of sediment are identified and mitigated. (3130 GM)	
	*** 02 Proposed new land-use facilities (roads, campgrounds, buildings) will not normally be located within flood-plain boundaries for the 100-year flood. (3131 GM)	a Implement mitigation measures when present or unavoidable future facilities are located in the active floodplain to ensure that State water quality standards, sediment threshold limits, bank stability criteria, flood hazard reduction, and instream flow standards are met during and immediately after construction and to protect life and property. (6604) (9A)
	*** 03 Limit sediment yield within threshold limits. (3132 GM)	a. Prescription-induced water yield increases should not exceed prescribed thresholds of allowable increase nor should the total yield of water and sediment exceed maximum allowable amounts. (6060) (9A)

MANAGEMENT ACTIVITIES*	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Water Resource Improvement and Maintenance		*** b. Treat disturbed areas, resulting from management activities, to limit sediment yields to acceptable levels during the construction field season (9130 GM)
	*** 04 Maintain channel stability, stream profile and vegetative cover in at least their current conditions (3133 GM)	*** a. Limit Management induced changes in channel rating or classification score to an increase of 20 percent or less. Use channel stability criteria established by Cooper, 1978 and Pfankuch, 1975 Use channel classification criteria established by Rosgen, 1980. (9131 GM)
		*** b. Avoid channelization of streams Where channelization is unavoidable for flood control of other purposes, use stream geometry relationships to re-establish meanders, width/depth ratios, channel stability, etc , consistent with major stream types. (9132 GM)
		*** c. Avoid altering vegetative cover which causes stream instability, loss of channel cross-sectional areas and the loss of water quality (9133 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Water Resource Improvement and Maintenance		*** d Stabilize streambanks, which are damaged beyond natural recovery, in a reasonable time period (9134 GM)
	*** 05 Design and locate settling ponds to reduce downstream sediment yield and to prevent washout during high water. (3134 GM)	*** a Locate settling ponds outside of the active channel Restore any channel changes to hydraulic geometry standards for each stream type (9135 GM)
	*** 06 Require concurrent monitoring during mitigation to ensure that mitigative measures are effective and in compliance with state water quality standards (3135 GM)	
Soil Resource Management	*** 01 Rehabilitate and stabalize disturbed soil areas where unacceptable impacts would occur (3180 GM)	*** a The following priorities apply to disturbed soil areas 1. Aquatic ecosystems 2 Wetlands 3 *Riparian ecosystems* (9180 GM)
	*** 02 Allow use of heavy construction equipment on a case-by case basis (3181 GM)	*** a If heavy equipment is required for construction, it will be used only when the soil will not be susceptible to permanent damage (9181 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Soil Resource Management	03 Maintain or enhance the long-term productivity of soils within the riparian ecosystem. (0694) (9A)	*** a Soils will be protected according to direction and guidelines contained in federal, state and regional policies, executive orders and handbooks (9182 GM) *** b Provide a general awareness of the importance of soil and water relationships and the effects that management activities may have on surface or subsurface flows and the soil mantle (9183 GM)
Mining Law Compliance and Administration	01 Minimize detrimental disturbance to the riparian area by mineral activities Initiate timely and effective rehabilitation of disturbed areas and restore riparian areas to state of productivity comparable to that before disturbance. (0706) (9A)	a Prohibit the depositing of soil material from drilling, processing, or site preparation in natural drainageways (6612) (9A) b Locate the lower edge of disturbed or deposited soil banks out-side the active floodplain. (6614) (9A) c Prohibit stockpiling of top-soil or any other disturbed soil in the active floodplain (6616) (9A) d Prohibit mineral processing (milling) activities with the active floodplain (6618) (9A) e. Discontinue heavy equipment use when soil compaction, rutting and puddling is present (6620) (9A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Mining Law Compliance and Administration	02 Locate mineral removal activities away from the water's edge or outside the riparian area. (0708) (9A)	a Locate drilling mud pits out-side the active floodplain unless alternate locations are more environmentally damaging. If location is unavoidable, seal and dike all pits to prevent leakage (6624) (9A) b Drain and restore roads, pads, and drill sites immediately after use is discontinued. Revegetate to 80 percent of ground cover in the first year Provide surface protection during stormflow and snowmelt runoff events. (6626) (9A)
	03 Design and locate placer mine settling ponds to prevent washout during high water. Locate settling ponds outside of the active channel Restore any channel changes to hydralic geometry standards for each stream type. (0710) (9A) 04 Confine heavy equipment use to areas necessary for mineral extraction (0712) (9A) 05 Locate mining camps outside the active flooplain (0716) (9A)	a Permit diversion activities within the riparian zone where technology is available to maintain water quality standards, sediment threshold limits, and instream flow standards (6622) (9A)
	*** 06 Require concurrent monitoring to ensure that mitigative measures are effective and in compliance with State water quality standards (0714) (9A)	*** a Ensure that Forest General Direction and Standards and Guidelines meet all state best management practices. (9140 GM)
	*** 07 The removal of common variety minerals for sale or free use will not be permitted unless the results can be shown to enhance the aquatic and riparian systems (3146 GM)	*** a. Examples of conditions with potential for enhancement are depositioned materials causing a flood hazard, damaged fisheries, loss of depth or capacity in existing lakes or ponds, and buried wetlands or bogs. (9141 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Mining Law Compliance and Administration	*** 08 Operating plans for removal of locatable minerals will provide for reasonable protection and on a voluntary base enhance the riparian zone (3147 GM)	
Transportation System Management	01 Locate roads and trails outside riparian areas unless alternative routes have been reviewed and rejected as being more environmentally damaging. (0718) (9A)	*** a. Do not parallel streams when road location must occur in or adjacent to *riparian areas except where absolutely* necessary Cross streams at right angles (9207 GM)
		*** b Necessary streamcourse crossings will insure fish passage, non-erosive water velocities and channel stability, and insure erosion control on cuts, fills and road surfaces. (9208 GM)
		*** c Use road closures as needed to protect riparian habitat and values. (9209 GM)
	02 Create artificial sediment traps with barriers where the natural vegetation is inadequate to protect the waterway or lakes from accelerated sedimentation (0720) (9A)	*** a. Create temporary sediment traps to prevent construction induced sedimentation, emphasize the use of natural materials (9210 GM)
	*** 03 Minimize detrimental disturbance to the riparian area by construction activities. (3208 GM)	*** a Complete or treat active construction projects prior to expected significant runoff periods to minimize sediment yields (9211 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Transportation System Management		*** b. Initiate timely and effective rehabilitation of disturbed areas and restore riparian areas so that a vegetation ground cover, or suitable substitute, protects the soil from erosion and prevents increased sediment yield. (9212 GM)
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (3222GM)	*** a. Initiate prompt control of all wildfires unless prescribed to the contrary by a fire management plan (9225 GM) *** b. Erosion control measures required to restore favorable riparian conditions following fir suppression activities will be undertaken as soon as practical to do so (9226 GM) *** c. Fire suppression tactics will emphasize minimum disturbance. (9227 GM)

MANAGEMENT PRESCRIPTION 10A

(Provides for Research Natural Areas)

Emphasis is on research, study, observations, monitoring, and educational activities that are nondestructive and nonmanipulative and that maintain unmodified conditions

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Meet stated visual quality objective. (0125) (10A)	a Do not allow negative deviation from an Adopted Visual Quality Objective (VQO) of retention (9025) (10A)
Recreation Site Construction and Rehabilitation	01 Prohibit construction of developed recreation sites (0368) (10A)	
Dispersed Recreation Management	01 Discourage or prohibit any public use which contributes to impairment of research or educational values. (0369) (10A)	a Reference FSM 4063.36. (6291) (10A)
	02 Permit and encourage use by scientists and educators (0370) (10A)	
Wildlife Habitat Improvement and Maintenance	01 Prohibit any direct habitat manipulation (0371) (10A)	
Range Resource Management	01 Restrict grazing by livestock to that essential for the maintenance of a specific vegetation type. (0372) (10A)	
Special Use Management (Non -Recreation)	01 Use special use permits or cooperative agreements to authorize and document scientific activity. (0374) (10A)	a Reference FSM 4063 37 (6217) (10A)
Withdrawals, Modifications and Revocations	01 Withdraw from mineral entry in conformance with Section 204 of Federal land Policy and Management Act of 1976 (0375) (10A)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Property Boundary Location	01 Monument all corners or turning points and document and and record the monumentation in the establishment report. Mark boundaries in the field when appropriate to ensure integrity of the area (0376) (10A)	
Transportation System Management	01 Generally, physical improvements, such as roads are not permitted. (0377) (10A)	
Trail System Management	01 Limit trails to those needed for access to conduct research and for educational purposes. (0378) (10A)	
Fire Planning and Suppression	01 Extinguish wildfires endangering the RNA Allow fires within the RNA to burn undisturbed unless they threaten persons or property outside the area, or the uniqueness of the RNA. (0379) (10A)	a Leave fire-caused debris for natural decay. (6218) (10A)
	02 Do not reduce fire hazard within the RNA. (0380) (10A)	
Law Enforcement	01 Use special closures when necessary to protect the RNA from actual or potential damage from public use (0381) (10A)	a. Issue closure order under provisions of 36 CRF 261.50 (FSM 4063.3) (6219) (10A)
Protection	01 Take no action against endemic insects, diseases or wild animals. (0382) (10A)	

MANAGEMENT PRESCRIPTION 10C

(Provides for special interest areas.)

Emphasis is on management of areas of unusual scenic, historical, geological, botanical, zoological, paleontological, or other special characteristics to protect and where appropriate, foster public use and enjoyment of these areas

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES	
Visual Resource Management	01 Manage for adopted VQO. (2022GM) (10C)	a. Special Interest Area	Adopted VQO
		Slumgullion Slide	Retention
		Mount Emmons Iron Bog	Retention
		Ophir Needle	Retention
		Alpine Tunnel	Partial Retention
		Dry Mesa Quarry (8026GM) (10C)	Modification
Recreation Site Construction and Rehabilitation	01 Prohibit construction of developed recreation sites. (0368) (10C)		
Dispersed Recreation Management	01 Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided (0445) (10C)		
	02 Provide roaded natural recreation opportunities within 1/2 mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public travel. Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals with 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use. Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class. Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use. (0650) (10C)	a See Forest Management Requirements for maximum use and capacity levels. (8027GM) (10C) b Specify off-road vehicle restrictions based onORV use management (FSM 2355, R2, Supp. 88). (6083) (10C)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF. Dispersed Recreation Management	03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted. (0174) (10C)	
	04 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating snowO in other alpine, and other ecosystems, where needed to protect soils, vegetaion, or special wildlife habitat. (0154) (10C)	
	05 Discourage or prohibit any public use which contributes to impairment of research or educational values in the Dry Mesa Dinosaur Quarry area (2029GM) (10C)	a. Reference FSM 4063 36 (6291) (10C)
	06 Permit and encourage use by scientists and educators (0370) (10C)	
	07 Provide signing for interpretation and protection of Ophir Needle Alpine Tunnel, Slumgullion Earthflow and Dry Mesa Dinosaur Quarry (2030GM) (10C)	
Wildlife Habitat Improvement and Maintenance	01 Prohibit any direct habitat manipulation. (0371) (10C)	
Range Resource Management	01 Manage livestock distribution and stocking rates to be compatible with special interest feature. (2082GM) (10C)	
Special Use Management (Non -Recreation)	01 Use special permits or cooperative aggreements to authorize and document scientific activity. (0374) (10C)	a Reference FSM 4063.37. (6217) (10C)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Withdrawals, Modifications and Revocations	01 Withdraw from mineral entry in conformance with Section 204 of Federal Land Policy and Management Act of 1976 (PL 94-579)> (0375) (10C)	
Property Boundary Location	01 Monument all corners or turning points and document and record the monumentation in the establishment report Mark boundaries in the field when appropriate to ensure integrity of the area. (0376) (10C)	
Trail System Management	01 Develop trails for interpretation and self study for Ophir Needle and Slumgullion Earthflow. (2212GM) (10C)	
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area. (2223GM) (10C)	a Promt control of all wildfires. (8220GM) (10C)

MANAGEMENT PRESCRIPTION 10E

(Provide for municipal and watershed and municipal water supply watersheds)

Management emphasis is to protect or improve the quality of municipal water supplies. Management practices vary from use restrictions to water resource improvement practices, with the primary objective of meeting water quality standards established for the individual watershed. A secondary objective is to manage the watersheds to improve the yield and timing of water flows consistent with water requirements.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management	01 Manage for adopted VQO. (2022GM) (10E)	
	02 Implement visual resource management, as outlined in the Forest Management Requirements (2023GM) (10E)	
Dispersed Recreation Management	01 Allow motorized travel only on established roads and trails Close watershed to all travel when the road or trail surfaces could be damaged to the degree that water quality would be degraded (0304) (10E)	
Range Resource Management	01 Confine livestock trailing to established driveways and historic trailing routes. (0270) (10e)	
	02 Reduce or remove livestock if municipal water quality is endangered (0305) (10E)	
	03 Use only intensive grazing systems or remove livestock when recovery of range condition cannot be accomplished by an intensive grazing system (0325) (10E)	
	04 Improve range condition to mid-seral or better or forage value rating to moderately high or better. (0326) (10E)	
	05 Invest in cost-effective allotment management and associated range improvements (0327) (10E)	

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF Range Resource Management	06 Invest in cost-effective grazing management and range-land productivity improvements. Where improvements include water developments, a water right in the name of the United States must be obtained. (0328) (10E)	
Silvicultural Prescriptions	01 Manage Forest Cover Types using the following harvest methods: - Clearcut in lodgepole and aspen, - Shelterwood in interior ponderosa pine and mixed conifer, and - Selection (group or single tree) in Engelmann spruce-subalpine fir. (0485) (10E)	a Apply harvest treatments to forest cover types as specified below on at least 80% of the forest cover type Up to 20 percent of the type may be treated using other harvest methods specified in Forest Direction. (6074) (10E)
	02 Apply a variety of silvicultural systems and harvest methods which best meet resource management objectives (0016) (FDR)	*** a Use the following harvest methods at least 80% of the time when applying management to the different forest cove types.

Forest Cover Type	Appropriate Harvest Methods* Even-aged	Uneven-aged
Ponderosa Pine	SW	GS & ST
Aspen	CC	--
Lodgepole Pine	CC & SW	GS
Engelmann spruce-Subalpine-fir	SW	GS & ST
Douglas -fir		
Mistletoe infected Stands - all species	CC	--

* The following abbreviations are used for harvest methods:
SW = Shelterwood
CC = Clearcut
GS = Group Selection
ST = Single tree selection
(9401) (10E)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Water Resource Improvement and Maintenance	01 Prevent or reduce debris accumulations in riparian areas that reduce stream channel stability and capacity (0307) (10E)	
	02 Prevent soil surface compaction and disturbance in riparian ecosystems. Allow use of heavy construction equipment for construction, residue removal, etc., during periods when soil is least susceptible to compaction or rutting. (0003) (10E)	a. Proposed land-use facilities (roads, campgrounds, buildings) should not be located within floodplain boundaries for the 100-year flood Protect present and future facilities that cannot be located out of the 100-year floodplain by structural mitigation (deflection structures, riprap, etc.) (6051) (10E)
	03 Prevent stream channel instability, loss of channel cross-sectional areas, and loss of water quality resulting from activities that alter vegetative cover (007) (10E)	a. Limit Changes in Channel rating or classification scores to an increase of 10 percent or less Use channel stability criteria established by Cooper 1978 and Pfankuch, 1975 Use channel classification criteria established by Rosgen, 1980. (6001) (10E)
		b Prescription-induced water yield increases should not exceed prescribed thresholds of allowable increase nor should the total yield of water and sediment exceed maximum allowable amounts as stated in the above references (6060) (10E)
	04 Manage non-forested areas to improve streamflow through through increased on-site water yields and meet State water quality standards Use available snowdrift technology, such as snow fences, windrowed brush piles, linear conversion of unbroken brush to grass, low earthen ridges, etc,, to capture and stabilize blowing snow. (0303) (10E)	a Structures are designed in terms of the size of and snow volumes available from the upwimd source areas, local and downwind terrain features, prevailing winds, and deposition area conditions, etc., as referenced in "Studying Snow-drifting Problems with Small-Scale Models Outdoors" by Tabler, R.D and Jaivell, R S., Proceedings Western Snow Conference April 15-17, 1980 (6164) (10E)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Soil Resource Management	01 Immediately rehabilitate man-caused disturbances and restore burned areas Inspect rehabilitated areas annually and provide maintenance necessary to protect the watershed (0309) (10E)	
Fire Planning and Suppression	01 Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area (2223GM) (10E)	a Prompt control of all wildfires (8220GM) (10E)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
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	02 Implement visual resource management, as outlined in the Forest Management Requirements. (2023GM) (10E)	
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	02 Reduce or remove livestock if municipal water quality is endangered. (0305) (10E)	
	03 Use only intensive grazing systems or remove livestock when recovery of range condition cannot be accomplished by an intensive grazing system. (0325) (10E)	
	04 Improve range condition to mid-seral or better or forage value rating to moderately high or better. (0326) (10E)	
	05 Invest in cost-effective allotment management and associated range improvements (0327) (10E)	

MANAGEMENT ACTIVITIES	GENERAL *DIRECTION*	STANDARDS & GUIDELINES
CONTINUATION OF. Range Resource Management	06 Invest in cost-effective grazing management and range-land productivity improvements. Where improvements include water developments, a water right in the name of the United States must be obtained. (0328) (10E)	
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Mistletoe infected Stands - all species	CC	--

* The following abbreviations are used for harvest methods:
SW = Shelterwood
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GS = Group Selection
ST = Single tree selection
(9401) (10E)

*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
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	03 Prevent stream channel instability, loss of channel cross-sectional areas, and loss of water quality resulting from activities that alter vegetative cover. (007) (10E)	a Limit Changes in Channel rating or classification scores to an increase of 10 percent or less Use channel stability criteria established by Cooper 1978 and Pfankuch, 1975 Use channel classification criteria established by Rosgen, 1980. (6001) (10E)
		b. Prescription-induced water yield increases should not exceed prescribed thresholds of allowable increase nor should the total yield of water and sediment exceed maximum allowable amounts as stated in the above references (6060) (10E)
	04 Manage non-forested areas to improve streamflow through through increased on-site water yields and meet State water quality standards. Use available snowdrift technology, such as snow fences, windrowed brush piles, linear conversion of unbroken brush to grass, low earthen ridges, etc , to capture and stabilize blowing snow. (0303) (10E)	a. Structures are designed in terms of the size of and snow volumes available from the upwind source areas, local and downwind terrain features, prevailing winds, and deposition area conditions, etc., as referenced in "Studying Snowdrifting Problems with Small-Scale Models Outdoors" by Tabler, R D and Jairell, R.S , Proceedings Western Snow Conference April 15-17, 1980 (6164) (10E)

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IV. Monitoring and Evaluation

CHAPTER IV - MONITORING AND EVALUATION

TABLE OF CONTENTS

CHAPTER IV

MONITORING AND EVALUATION

Introduction

The Monitoring and Evaluation Program is the management control system for the Forest Plan. It will be used to provide information on the progress and results of implementation. One of the results of monitoring will be an assessment of the need for amending or revising the Plan.

Monitoring in intended to help keep the Amended Forest Plan current and responsive to changes. Monitoring and evaluation each have a distinctly different purpose and scope. Monitoring consists of gathering data, observations, and information. During evaluation, the data and information are analyzed and interpreted. This process provides the information necessary to determine if conditions are within the bounds and intent of the Plan direction. Forest Plan monitoring does not replace or substitute for other Forest monitoring activities. Many activities are currently being monitored on the Forest to comply with administrative and legal responsibilities.

Monitoring and evaluation will provide information to:

1 Compare planned versus applied management standards and guidelines to determine if objectives are achieved (36 CFR 219.12 (k)).

2. Quantitatively compare planned versus actual outputs and services (36 CFR 219.12 (k)(l)).

3. Measure effects of prescriptions, including significant changes in land productivity (36 CFR 219 12 (k)(2)).

4. Determine planned cost versus actual costs associated with carrying out prescriptions (36 CFR 219.12 (k)(3))

5. Determine population trends of the management indicator species and relationship to habitat changes (36 CFR 219.19 (a)(6)).

6. Evaluate effects of National Forest management on adjacent land, resources, and communities (36 CFR 219.7 (f)).

7. Identify research needs to support or improve National Forest managment (36 CFR 219.28).

8. Determine if lands are adequately restocked (36 CFR 219.12 (k)(5)(i)).

9. Determine, at least every ten years, if lands identified as unsuitable for timber production have become suitable (36 CFR 219.12 (k)(5)(ii)).

10. Determine whether maximim size limits for harvest areas should be continued (36 CFR 219.12 (k)(5)(iii)).

11. Ensure that destructive insects and disease organisms do not increase to potentially damaging levels following management activities (36 CFR 219 12 (k)(5)(iv)).

On the GMUG NF's, the Primary Staff Officers (in the Supervisor's office) are responsible for insuring that Forest Plan monitoring occurs Key elements of monitoring are quality and quantity control, this is the cornerstone of a staff officer's responsibilities. In most cases, either functional staff specialists in the Supervisor's office or Ranger District employees will actually perform the monitoring activities which will be determined in the **annual monitoring program.**

An **annual monitoring program** will be prepared as part of the Forest's annual work program. This program will include the details displaying the amount and location of monitoring to be accomplished. It will be based on the current Forest Monitoring Plan and will be implemented as funding levels permit Funding for implementation of the **annual monitoring program** will be planned for during program budget development While actual annual funding levels may or may not correspond to the program budget level, management will ensure that monitoring will be funded at a level commensurate with the level of funding provided for project implementation. As an example, if timber sales are funded at the 90% level for a given year, then the monitoring associated with timber sale impacts should also be funded at least at the same level In other cases, such as water quality monitoring, it may be necessary to maintain monitoring at the 100% level to assure effective monitoring over time.

The monitoring items and costs displayed in Tables IV-I through IV-III represent the estimated monitoring cost assuming 100% funding of the Forest Plan.

A **monitoring and evaluation report** will be prepared annually. Evaluation is the analysis of the monitoring results and addresses the goals, objectives, long-term relationships, Forest and management area direction, implementation schedules, and significant management activities occurring on the Forest. The interdisciplinary team prepares the **monitoring and evaluation report** and makes recommendations to the Forest Supervisor regarding amendment or revision of the Plan.

Results of monitoring and evaluation

The action(s) recommended to the Forest Supervisor by the Interdisciplinary Team can include:

- that no changes are needed as monitoring indicated that goals, objectives, and standards and guidelines have been achieved;
- referral to the appropriate line officer for improvement of administration and management to ensure proper application of the Standards and Guidelines.
- modification of the individual management areas and/or management area prescription(s).
- revision of the projected output schedule,
- a reallocation of budget priorities to achieve Forest Plan objectives, or

- revision of the Forest Plan.

The documented file of the Forest Supervisor's decisions resulting from monitoring and evaluation is maintained for future use in amending or revising the Forest Plan. The **monitoring and evaluation report** will be prepared and submitted to the Regional Forester on an annual basis and made available for public review.

A distinction must be made between project level and Forest level monitoring. For some projects, monitoring may be an essential element identified during the site-specific NEPA process. An example is a timber sale where concerns of the State Division of Wildlife lead to tracking radio-collared elk within the sale area during the three year life of the timber sale. The Ranger District where the sale occurs is responsible for budget, manpower and all other aspects of the monitoring effort. This is not a Forest-wide issue and is therefore not included in the Forest Monitoring Plan.

For other projects, there may be long term concerns such as stream siltation or land failures or a series of individual impacts which, when taken together,have cumulative effects. In these cases, monitoring needs must be clearly identified in NEPA documentation so that they can be aggregated at the Forest level and incorporated into the Forest Monitoring Plan (through a Plan amendment).

Three Levels of Monitoring

Three levels of monitoring and evaluation will be carried out. implementation monitoring, effectiveness monitoring and validation monitoring. The interrelationships of these monitoring and evaluation activities are shown in figure IV-1.

The purpose of implementation monitoring is to determine if plans, prescriptions, projects, and activities are implemented and designed and in compliance with Forest Plan objectives and Standards and Guidelines

The purpose of effectiveness monitoring is to determine if plans, prescriptions, projects, and activities are effective in meeting management direction, objectives, and the Standards and Guidelines.

The purposes of validation monitoring is to determine whether the initial data, assumptions, and coefficients used in development of the Plan are correct; or if there is a better way to meet forest planning regulations, policies, goals, and objectives.

The Monitoring Plan which follows is divided into three sections to reflect the separate levels of monitoring. Any or all three can be amended in the future as additional monitoring needs are identified or as existing ones are no longer required.

Estimated Costs

The estimated costs for Forest Plan Monitoring (if the Forest is funded at the 100% Forest Plan level) are displayed below:

Resource Area	Average Annual Monitoring Costs (M$)
Target Reporting	5.0
NEPA Compliance	1.5
Recreation	9.6
Wildlife	31 0
Aquatic (Fisheries)	32.0
Range	85 0
Timber, Insect and Disease	16.0
Soils, Water, and Riparian	74.0
Minerals	10.0
Transportation System	16.5
Fire/Fuels and Air	4.0
T&E Species	13.0
Estimated Average annual costs at 100% Funding level	$297,600

FIGURE IV-1

EVALUATION OF MONITORING RESULTS
FOR FOREST PLAN IMPLEMENTATION

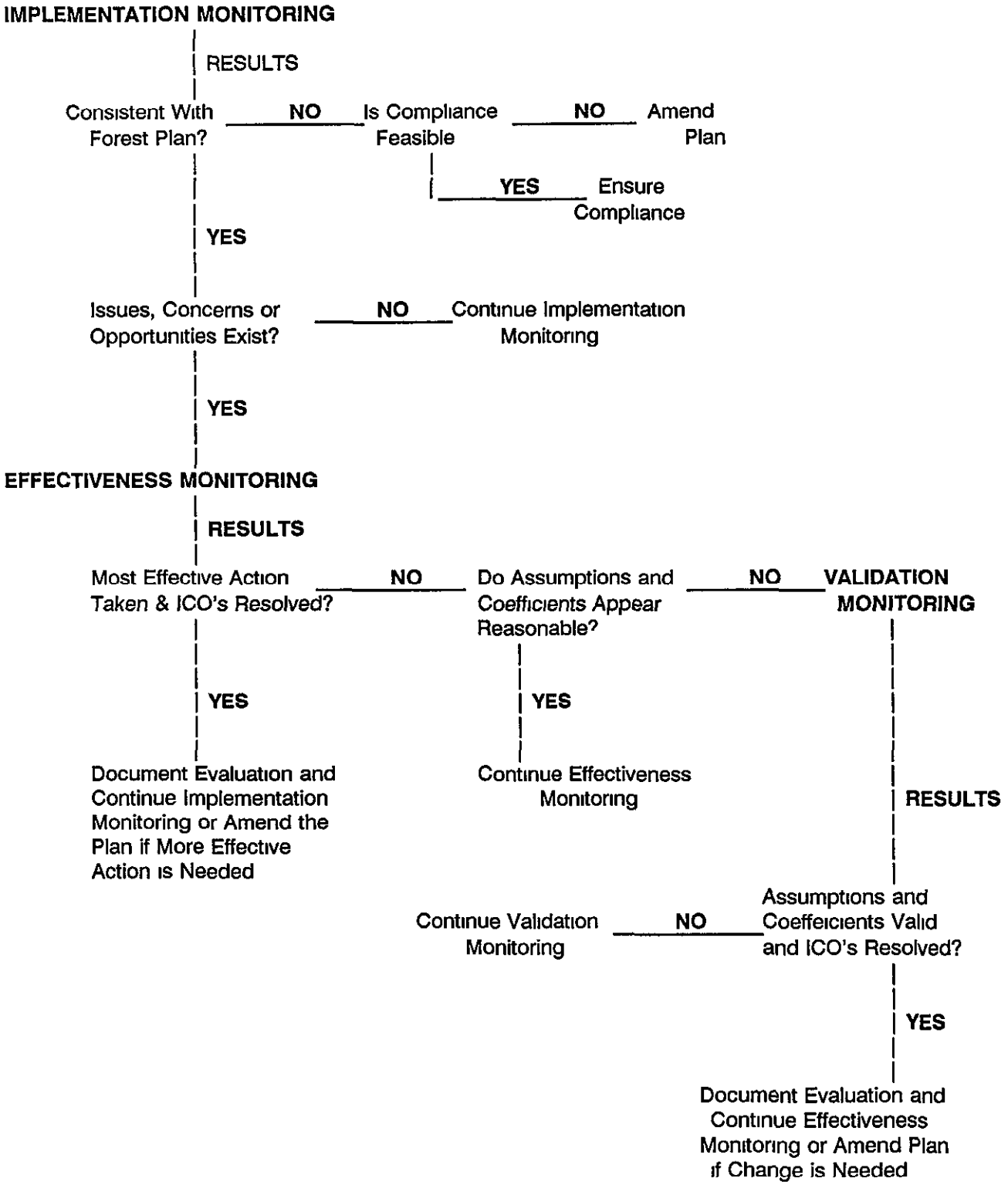


TABLE IV-1 IMPLEMENTATION MONITORING

Implementation monitoring is the first and most fundamental level in the monitoring program. The purpose of implementation monitoring is to determine if the plans, prescriptions, projects and activities are being implemented in accordance with the Forest Plan Direction including the Standards and Guidelines, objectives and other requirements. Are we doing what we said we would do? Evaluation of the results of implementation monitoring indicate whether implementation of a project or activity is consistent with the forest plan If the project or activity is not in compliance, steps must be taken to either insure compliance or adjustment of targets or the forest plan are required

Activity	Impementation Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsi-bility	Annual Costs M $'s	Action Indicated
TARGET REPORTING								
MAR Targets	Determine whether outputs/ activities shown in the Forest Plan are being accomplished Provide a "feedback" loop from actual accomplishment to Program Budget	For MAR items, compare annual accomplishment from MAR report with Forest Plan Data File annual average for plan period Track cumulative planned & accomplished through period	MAR Targets	100% of MAR items	Annual	Administrative Officer	5 0	See Table below

Situation	Action Indicated
Accomplishments match Forest Plan	None
Accomplishments do not match Forest Plan	
1 Discrepancy due to one-year or short-term "anomally" - i e. weather, response to emergency situation, etc	Management has two alternatives, depending on priorities (a) No Action if situation is non-recurring (b) Adjust subsequent year Program Budget
2 Discrepancy due to funding/target allocations	Management has two alternatives, depending on relative priorities· (a) If activity in question is high priority, adjust Program Budget allocations within overall constraints (b) If low priority, no action
3 Planned accomplishments not realistic for existing on-the-ground conditions	Forest Plan Amendment

TABLE IV-1 IMPLEMENTATION MONITORING

Activity	Implementation Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsibility	Annual Costs M $'s	Action Indicated
NEPA COMPLIANCE	Are NEPA documents in compliance with the Forest Plan? Are the projects being implemented in accordance with the documents?	On-the-ground and office reviews of project plans	NEPA documents, projects	2 annually on each District	Annually	Planning Staff Officer	1 5	Results documented, corrective action prescribed
RECREATION								
Vegetation and ground disturbing projects effects on Visual Resource Quality	Are visual quality objectives being met?	Post project review that compares the Plan visual qulaity objectives (VQO) with a *post project present* visual condition (PVC)	Project	10% sample of completed projects selected on an annual basis	2 years	Recreation Staff Officer	4 0	Document deficiencies in visual resource quality & prescribe corrective action
Vegetation & ground disturbing projects effects on semi-primitive recreation opportunities	Are ROS recreation settings being retained?	Post project analysis of project area & mapping ROS attributes	Acres changed	10% sample of completed projects in semi-primitive settings on an annual basis	4 years	Recreation Staff Officer	1 5	Document area lost from the semi-primitive setting & prescribe corrective action to minimize unplanned loss
Vegetation & ground disturbing project effects on cultural resources	Are the cultural resources being protected?	Field review	Projects	Annually as needed	Annually	Forest Archeologist	0 5	Document cultural resource loss & prescribe corrective action
Unauthorized use & natural agents effects on the cultural resource	Is unauthorized use or are natural agents damaging or destroying cultural resource properties?	Field review	Properties	Annually on 5 sites	Annually	Forest Archeologist	0 3	Document cultural resource property damage & prescribe corrective action where possible
TRAILS								
Motorized Trail Density	Are we meeting S&G's for motorized trail density in Rx 2A?	Use plan implementation map to determine density of motorized trails in Rx 2A	Miles per square mile	All 2A Rx adjacent to where a Mgmt project has taken place the previous year	Annual	Recreation Staff Officer	0 3	Document results & prescribe corrective action

TABLE IV-1 IMPLEMENTATION MONITORING

Activity	Implementation Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsibility	Annual Costs M $'s	Action Indicated
WILDERNESS								
Wilderness use effect on wilderness setting	Are the S&G's being achieved?	Field inspections	As needed	Annually as needed	Annually	Recreation Staff Officer	3 0	Document areas where the S&G's are being violated & prescribe corrective action or manage for the inconsistincy
WILDLIFE								
Habitat capability for MIS & population trends	Are capability levels being achieved to sustain desired populations for verebrate wildlife species?	Project plans, population estimates by CDOW & FS, RIS, and HABCAP	% of habitat capability provided, population #'s as available	On going on 5 projects selected annually Forest-wide analysis every 5 years	5 years for habitat capability, annually for population trends	Wildlife Staff Officer	4 0 annually, 7 0 every 5 years	Document results in annual report and prescribe corrective action as needed through Plan Amendments or on-the-ground corrective action as needed
Vegetative diversity	Meet applicable S&G's Are the minimum habitat needs for vertebrate wildlife species being met? Are seral stages, edge index, & spatial habitat requirements being achieved?	RIS/GIS, post project inspection, review project planning records	Acres of structural stages per diversity unit	On going on 5 projects selected annually Forest-wide analysis ever 5 years	5 years	Wildlife Staff Officer	5 0 annually, 9 0 every 5 years	Same as above
Old growth habitat/ cavity dependent species habitat	Is the integrity of biological old growth vegetation being provided at proper levels & spatial requirements to meet the desired population levels of dependent species?	RIS/GIS, Old growth scorecard	Acres per diversity unit, Minimum old growth scorecard rating	Inventory 3 diversity units per year where significant activities are proposed	5 years	Wildlife Staff Officer	4 0	Same as above
Habitat Effectiveness	Meet minimum S&G's Assure habitat created or existing provides the most total effective use by big game within desired objectives	RIS, analysis of forage/cover ratios & open road miles per section by diversity unit	Habitat Effectiveness Index (HEI)	On going on 5 projects selected annually Forest-wide analysis every 5 years	5 years	Wildlife Staff Officer	3 0 annually, 9 0 every 5 years	Same as above

TABLE IV-1 IMPLEMENTATION MONITORING

Activity	Implementation Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsibility	Annual Costs M $'s	Action Indicated
AQUATIC HABITAT (FISHERIES)								
Manage aquatic habitat for needs of indicator species	Are we managing habitat for the needs of trout & macroinvertebrate species? Are we meeting the S&G's under Forest Direction?	Evaluate data collection & projects proposed &/or completed, Literature search (HSI)	Miles and # of streams	Annually on emphasized watersheds	Annually	Fisheries Staff Officer	20 0	Determine limiting factors and needs for indicator species to include common trout species (Brown & Brook) & Colo River Cutthroat Trout.
Minimum Flows	Are we meeting Forest S&G's?	Coordinate with CDOW	# of streams	Annual 2% per year	Annual report if warranted	Fisheries Staff Officer	2 0	Submit needs to CDOW to be filed for these flows under Senate Bill 97
THREATENED, ENDANGERED & SENSITIVE PLANT AND ANIMAL SPECIES	Determine the status of T&E plant and animal species	Inventory and monitoring as required in coordination with other Federal and State agencies	Populations, acres of habitat	Annual, as needed	Annual	Range, Wildlife, and Fisheries Staff Officer	13 0	Any change in species condition, trend, or habitat will require immediate action to protect.
RIPARIAN	Are we managing riparian habitat to meet the S&G's in the 9A Rx?	Field reviews by ID Team	# Projects & activities affecting riparian areas	Annually on emphasized watersheds	Annual	Range, Wildlife, and Fisheries Staff Officer	10 0	Prescribe corrective action as necessary
	Are we managing riparian areas to reach the lates seral stage possible within the stated objectives?	Field reviews with riparian scorecards	# of acres and miles	Annually on emphasized watersheds	Annual	Range, Wildlife, and Fisheries Staff Officer	10 0	Recommend corrective action as needed Document successes
RANGE								
Forage Utilization	Are we meeting the utilization standards in the S&G's?	Clip/weigh & ocular estimates	% utilization	28 Allotments annually	Annually	Range Staff Officer	45 0	Modify livestock use where standards are routinely exceeded
C on & Trend	Determine habitat condition (seral stage) &/or direction of trend	Transects, scorecards, photo points, and/or historical studies (Parker 3-Step, etc)	Seral stage by acres	28 Allotments annually	Annually	Range Staff Officer	30 0	Adjust grazing system and/or stocking rates where trend is down or not moving toward desired future condition
Noxious Weeds	Determine level of infestation & treatment needs by species	Field observations	Acres	Annually as needed	Annually	Range Staff Officer	7 0	Update inventory of infestation and treated acres

TABLE IV-1 IMPLEMENTATION MONITORING

Activity	Implementation Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsibility	Annual Costs M $'s	Action Indicated
TIMBER								
Regeneration survival and stocking	Are standards being met?	Stand exams/RIS system	Acres and stocking rates	1st, 3rd, and 5th year after planting or harvest	Annually	Timber Staff Officer	9 0	Review causes of unsuccessful regeneratin and make recommendations for prevention of future failures
SOIL AND WATER								
Ground disturbing activities	Are the S&G's being implemented on projects with the potential to impact soil and water resources?	Project administration during and post project Evaluate whether contracts and permits were implemented and administered appropriately ID Team post project review	# projects	3 to 4 District projects per year	Completion of projects	Watershed Staff Officer	10 0	Document deficiencies and prescribe corrective action such as change of S&G's or improved administration
MINERALS								
Mining Operations	Are Operating Plans being followed & reclamation completed to meet management requirements & S&G's?	During and post project administration	# projects	As needed	Completion of project	District Rangers and Minerals Staff Officer	10 0	Document deficiencies & prescribe corrective action such as change of satndards or improved administration

TABLE IV-1 IMPLEMENTATION MONITORING

Activity	Implementation Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsibility	Annual Costs M $'s	Action Indicated
TRANSPORTATION SYSTEM								
Closure of newly constructed roads	Are newly constructed local roads closed? If not, is reason documented?	Review Road Mgmt. Decision Worksheets (RMDW's) Field check new roads	Miles	100% of RMDW's Filed check 3 projects per year	Annual	Engineering Staff Officer	3 0	Document results & prescribe corrective action, if needed
Rehabilitation of temporary roads	Are we meeting the S&G's?	Field check in conjunction with closed roads in the activity above	Miles of road properly and not properly rehabed within one year of cessation of need	Field check 3 projects per year	Annual	Engineering Staff Officer	(above)	Document results & prescribe corrective action, if needed
90% of obliterated road mileage will not have sustained use 3 years after obliteration	Are we meeting the standard?	Field check Do with Effectiveness Monitoring of Travel Management & road closures	% of miles not having sustained use	Field check 3 projects per year	Annual	Engineering Staff Officer		(Costs included in Effectiveness Monitoring) Document results & prescribe corrective action, if needed

TABLE IV-II EFFECTIVENESS MONITORING

Effectiveness monitoring occurs when issues, concerns or opportunities exist concerning a particular plan, prescription, project or activity that has been determined to be in compliance with Forest Plan Direction The purpose of effectiveness monitoring is to determine if the plans, prescriptions, projects, or activities are effective in meeting management direction and objectives Is what we are doing effectively accomplishing what we wanted to do? Evaluation of the results of effectiveness monitoring is used to adjust Forest Plan objectives, targets, prescriptions, standards and guidelines, conservation practices, mitigation measures, or other best management practices and could result in change to or amendment of the Forest Plan

Activity	Effectiveness Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsibility	Annual Costs M $'s	Action Indicated
WILDLIFE								
Wildlife Habitat Modifications	Are the habitat modifications producing the desired objectives?	Vegetative inspections & analysis of pre & post treatment activities	Pounds per acre, habitat capability, #'s of animals	Annually by project	Annually	Wildlife Staff Officer	10 0	Document results, adjust methods if necessary
AQUATIC								
Aquatic Habitat Improvements	Are the habitat modifications producing the desired objectives?	Pre and post project evaluations, biomass estimates (electroshocking)	# of structures	Annual 10%	3 years	Fisheries Staff Officer	10 0	If improvements aren't biologically or economically successful, then make recommendations to correct the situation
RIPARIAN								
Vegetative Treatments	Are the vegetative treatments providing desired results?	Pre and post treatment evaluations	# of treatments	Annually on emphasized watersheds	3 years	Range, Wildlife, and Fisheries Staff Officer	10 0	If treatments aren't effective, then revise plans.
Seral Stage	Are we reaching the upper mid-seral stage in riparian areas? How does this relate to aquatic habitat condition?	Riparian scorecard, Pfankuch, Cowfish, GAWS	Acres, miles	Annually on emphasized watersheds	Annually	Range, Wildlife, and Fisheries Staff Officer	10 0	Document results & make recommendations as necessary.
RANGE								
Forage Utilization Standards	Are the forage utilization standards in the range prescription realistic & achieving the intended objectives?	Photo plots and trend studies	% utilization	10 studies annually	5 years	Range Staff Officer	3 0	Modify utilization standards in Forest Plan as necessary

TABLE IV-II EFFECTIVENESS MONITORING

IV MONITORING AND EVALUATION

Activity	Effectiveness Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsibility	Annual Costs M $'s	Action Indicated
WATER								
Non-point Sources of Sediment	Is the implementation of the 9A Rx preventing non-point sources of sediment & meeting Colorado BMP's?	In conjunction with riparian monitoring Use of a demonstration watershed	# of unrehabed sites Quantitative increase over baseline	Annually on emphasized watersheds Intensive monitoring on one watershed	Annually & completion of projects	Watershed Staff Officer	50 + 30*	Document deficiencies & prescribe corrective action
Damage Causing Water Yield Increases	Are water yield increases causing channel & resources (fisheries) damage?	In conjunction with riparian monitoring Use of a demonstration watershed	# of disturbances Quantitative increase over baseline	Annually on emphasized watersheds Intensive monitoring on one watershed	Annually & completion of project	Watershed Staff Officer	50 + 30*	Document deficiencies & prescribe corrective action
FIRE								
Fire Planning & Suppression (includes wilderness)	Is our fire program cost effective?	Individual Fire Reports (5100-29), annual fire management report, and EFSA's	# of fires & acres burned and actual FFF costs	Currently	Annually	Fire Staff Officer	20	Review or revision of Fire Action Plan
Natural & Activity Fuel Treatments	Are fuel treatments effectively meeting habitat improvement & fire suppression activities?	Review prescribed burn plans and field reviews during and post treatment	Acres	Currently	Annually	Fire Staff Officer	20	Review or revision of prescribed burn plans
AIR								
Compliance with State Air Quality Standards including Class I areas	Is the Forest effectively complying with state air quality standards for prescribed burning?	On-site measurements & observations documented in burning plan (monitoring section)	# burns in or out of compliance	Currently	Annually	Fire Staff Officer	Variable	Curtail burning when air quality standard is exceeded by 10%
INSECT & DISEASE								
Prevention & Control of Insect & Disease population levels	Are our treatment activities effectively reducing or preventing increases in I&D's?	Aerial & ground surveys	Acres	Annually	Annually	Timber Staff Officer	20	Review/change management activities

* Annual cost of one intensively monitored watershed

TABLE IV-II EFFECTIVENESS MONITORING

IV MONITORING AND EVALUATION

Activity	Effectiveness Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsibility	Annual Costs M $'s	Action Indicated
SOILS								
Soil Productivity	Are S&G's effective in maintaining soil productivity?	Field review	# of unrehabed sites	5% of ground disturbing activities combined with other water monitoring activities	Annually & completion of project	Watershed Staff Officer	10 0	Document deficiencies & amend S&G's as required
TRANSPORTATION SYSTEM								
Travel Management	(a) Is travel management effectively implemented to accomplish resource objectives? Travel management components are 1) roads, 2) trails, and 3) areas (See FEIS page IV-146)	See Table Below	Narrative describing effectiveness	One area per Ranger District (plus all roads and trails within the area)	Annual	Engineering Staff Officer	10 0	Document results & prescribe corrective action, if needed
	(b) How much and what type of recreation opportunity is being provided?	See Table Below	miles	100% of inventory	Annual	Engineering Staff Officer	2 0	Document results, analyze trends, recommend amendments to travel management plan and/or Forest Plan

Travel Management Monitoring Methods

Monitoring Objective	Method
(a)	NEPA document and field reviews Review signing, closures, trail use, and area use Document management resource objectives, resource degradation, education, information, public acceptance
(b)	**ROADS** 1) closed to all motorized trail vehicles only, 2) open to motorized trail vehicles only, 3) open to all motorized vehicles, 4) 4WD recreation roads, and 5) seasonal restrictions **TRAILS** 1) open to motorized trail vehicles, 2) closed to motorized trail vehicles, 3) closed to horses, 4) closed to mountain bikes - a) wilderness - b) non-wilderness **AREAS** 1) open to OHV use, 2) closed to OHV use, 3) restricted areas by type restriction (i e seasonal snowmobile only, etc)

TABLE IV-III VALIDATION MONITORING

IV MONITORING AND EVALUATION

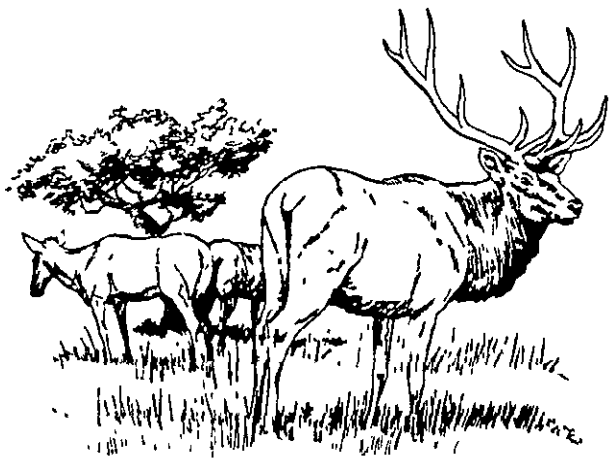
Validation monitoring is the third and final level of monitoring The purpose of validation monitoring is to ascertain whether the initial assumptions and coefficients used in development of the Forest Plan are correct or if there is a better way to meet forest planning regulations, policies, goals, and objectives Is the direction we have followed in the Forest Plan really the best way to accomplish our objectives? Evaluation of the results of validation monitoring indicates whether initial data, assumptions, and coefficients used in development of the plan are correct, or if there is a better way to meet forest planning regulations, policies, goals, and objectives.

Activity	Issues, Concerns and Opportunities	Monitoring Responsibility	Annual Cost M $'s	Method of Validation Monitoring
RIPARIAN				
Seral Stages	Is the upper mid-seral stage providing adequate protection for aquatic habitat quality?	Range, Wildlife, and Fisheries Staff Officer	4 0	Is the upper mid-seral stages of riparian condition an indication of aquatic habitat quality? Are they directly related? Riparian scorecards will be used on emphasized watersheds in conjunction with other riparian monitoring
TIMBER				
Yield Projections, Species volume per acre, Treated acres by silvicultural methods, financial efficiency costs and revenues, industry demand	Is data used in FORPLAN accurate?	Timber Staff Officer	5 0	Sale cruise data, RIS reporting system, SILVA 99 Report, TSPIRS, TSSA reports, STARS, and measurement of permanent growth and yield tables

TABLE IV-III VALIDATION MONITORING

IV MONITORING AND EVALUATION

Activity	Issues, Concerns and Opportunities	Monitoring Responsibility	Annual Cost M $'s	Method of Validation Monitoring
FACILITIES				
Road density coefficients used in FORPLAN	Are coefficients used in FORPLAN accurate?	Engineering Staff Officer	1 0	Determine road density in all timber sales with road construction/ reconstruction by timber type (same species breakdown as in FORPLAN) Compare with coefficients used in FORPLAN Do annually for ease of data collection Use to adjust coefficients for next Plan revision
Average Road Costs	Are the road costs used in FORPLAN accurate	Engineering Staff Officer	0 5	Determine average costs for construction/reconstruction of arterial, collector and local roads Do annually for ease of data collection Use to adjust costs for next Plan revision
Water production from Aspen harvest	Are the aspen harvest water production coefficients used in FORPLAN accurate?	FHO watershed staff	30 0	A ten-year paired watershed study will be established Stream flow and precipitation gauges will be utilized before and after aspen harvest to determine statistically valid changes This study will be used for both effectiveness and validation monitoring



V. Index

V. INDEX

APPENDICES

(NOTE: Appendices E,F,H,O,Q,and S are Appended -
Intermediate letter-named appendices do not exist)

APPENDIX E

THREE YEAR TIMBER SALE PLANS

APPENDIX E

The purpose of this appendix is to display the next three years planned timber sale offerings. It represents the maximum level that would be offered, if funding and manpower exists at an appropriate level. This appendix will be updated annually to display the newest information. A column exists displaying what volume has been offered already in the first decade so that the ASQ levels can be tracked.

Individual timber sale offering information (sale name, location, volume, etc.) is displayed in the Forest's and District's timber sale action plans.

PLANNED TIMBER SALE PROGRAM (MBF)

Timber Program Component	First Decade ASQ	Offered to Date	FY 91	FY 92	FY 93
Chargeable Volume					
Sawtimber	210,000	0	21,000	21,000	21,000
Conifer POL	24,000	0	0	0	0
Aspen POL	150,000	0	18,000	16,500	15,000
* *(aspen acres)*	*(13,700)*	0	*(1,640)*	*(1,500)*	*(1,370)*
Total Chargeable Volume	384,000	0	39,000	37,500	36,000
Non-Chargeable Volume					
Fuelwood, post and poles, etc.	NA	0	7,000	7,000	7,000

* Because of the past interest in regulating aspen harvests by acres, they have been shown in this table. The commercial timber sale program will be regulated by volume (million board feet) and not acres under this Plan Amendment. The acres are estimates of lands harvested to produce the stated volumes.

PLANNED LOCAL ROAD CONSTRUCTION/RECONSTRUCTION PROGRAM (MILES)

Local Intermittent Roads	First Decade	Built to Date	FY 91	FY 92	FY 93
Construction	240	0	28.8	26.4	24
Reconstruction	230	0	27.5	25.2	23

These local intermittent roads are built and paid for as an integral part of individual timber sale packages. They are almost always low standard, native surface roads confined to the timber sale area and are closed to public use once the timber sale activities are completed. Additional roads may also be built as part of timber sale packages, but are arterial and collector roads; they are listed in Appendix O.

APPENDIX F

LAND SUITED FOR TIMBER PRODUCTION

LAND SUITED FOR TIMBER PRODUCTION

Identifying lands suited for timber production is an involved process. First, a determination is made as to whether lands are available and capable of producing commercial crops of trees on a sustained basis These lands are classified as tentatively suited timber lands. Only tentatively suited lands are considered for timber production in the Amendment alternatives. In each supplemental alternative, some of the tentatively suited lands are chosen for timber production based on the issues, concerns, and opportunities addressed in the alternative Tentatively suited lands chosen for timber production are classified as lands suited for timber production.

The procedure for selecting suited timber lands in an alternative involves the analysis of many factors. These include the emphasis of the alternative, the management intent selected for each analysis area, economic efficiency criteria and consideration of the necessary transportation network A complete discussion of this procedure is included in Appendix B to the FSEIS A general description of the results of the analysis is presented in the tables and figures below.

Table F-1 provides a tabulation of Forest lands and tentatively suited timber lands, and compares changes in tentatively suited timber lands between the original 1983 Forest Plan, and the Amendment. The most striking change between the two determinations of tentatively suited lands is a significant decrease in the acres of "Forested Land Withdrawn From Timber Production" in the Amendment determination. The original 1983 determination has 848,337 acres withdrawn because they did not meet minimum biological growth standards of 20 cubic feet per acre per year The Amendment determination of tentatively suited lands does not use minimum biological growth standards to withdraw acres from timber production. The Amendment instead uses other methods to remove poor sites from the tentatively suited land base such as a determination of "Forest Land Incapable of Producing Industrial Wood".

Table F-2 provides a tabulation of tentatively suited timberlands which are not appropriate

Table F-3 displays the distribution of suited timber land by appropriateness criteria, access, slope steepness, timber species, and condition

Table F-4 displays a comparison of the 1983 Forest Plan and the Amendment Suited land base by species and by size class.

Table F-5 displays the average annual live timber volume to be harvested by time period and the long term sustained yield harvest level.

Table F-6 displays the average annual acres that will receive silvicultural treatment each decade

Table F-7 displays the Allowable Sale and Program Sale Quantities using the periods 1991 to 2000 and 2001 to 2010.

APPENDIX F

TABLE F-1 - LAND CAPABLE, AVAILABLE, AND TENTATIVELY SUITED FOR TIMBER PRODUCTION

CRITERION	Non Forest Water	Non Forest Land	Oakbrush	Pinjon Juniper	Aspen Cottonwood	Lodgepole Pine	Ponderosa Pine	Spruce Fir	Totals	Original
NON FOREST LAND										
Non-Forest		838,229							838,229	715,907
-Water	10,515								10,515	15,199
Subtotal									**848,744**	**731,106**
FOREST LAND WITHDRAWN FROM TIMBER PRODUCTION										
-Wilderness					49,829	32,475	151	186,661	269,116	213,249
-Research Natural Areas										
(1) Gothic										
(2) Escalante					32		205		237	
-Wilderness Study Areas										
(1) Fossil Ridge					386	24,853		8,296	33,535	32,181
-Further Planning Area										
(1) Recommended portion of Cannibal Plateau					1,853	130		4,818	6,801	
Minimum Biological Growth (less than 20 CF/AC/YR)										848,337
Administrative Sites					1,0043	50	165	1,219	2,477	1,298
-Campgrounds					781	3,166		3,525	7,472	
Cultural Areas								400	400	
Subtotal					**53,924**	**60,674**	**521**	**204,919**	**320,038**	**1,095,491**
FOREST LAND INCAPABLE OF PRODUCING INDUSTRIAL WOOD			**167,606**	**112,097**	**58,226**	**4,384**	**10,256**	**65,044**	**417,613**	
NOT PHYSICALLY SUITED										
-Restocking within 5 years cannot be assured					328	108	355	8,126	8,917	
-Potential Resource Damage (plus 5A's)					71,485	2,077	1,309	27,712	102,582	37,381
-Inadequate Response Information					779		641	331	1,751	
Subtotal					**72,591**	**2,185**	**2,305**	**36,169**	**113,250**	**37,381**
UNSUITED TOTAL	10,515	838,229	167,606	112,097	184,741	67,243	13,082	306,132	1,699,645	1,863,978
TOTAL NET FOREST ACRES	10,515	838,229	167,606	112,097	530,526	317,119	114,700	862,394	2,953,186	2,953,186
LANDS TENTATIVELY SUITED FOR TIMBER PRODUCTION	**0**	**0**	**0**	**0**	**345,785**	**249,876**	**101,618**	**556,262**	**1,253,541**	**1,089,208**

TABLE F-2

MAPPING ACRES

CRITERIA	ASPEN	CONIFER	TOTALS
GROSS ACRES	530,526	1,294,213	1,824,739
TENTATIVELY SUITED	345,785	907,756	1,253,541
NOT APPROPRIATE			
1-Rock	4,261	23,983	28,244
2-Low Productivity	14,182	30,763	44,965
2-Isolated Patches	33,760	79,995	113,755
3-High Road Cost/Access	110,897	371,126	445,737
5B-Other Values	13,367	21,056	70,709
SUBTOTAL NOT APPROP	176,467	526,943	703,410
APPROPRIATE (Suited)	163,918	380,813	544,731
High Road Cost (Suited)	5,400	0	5,400
SUBTOTAL SUITED	169,318	380,813	550,131

Table F-3

SUITED TIMBER LAND BY FSEIS ANALYSIS AREA(AA),
APPROPRIATENESS CRITERIA ROAD ACCESS,
SLOPE, TIMBER SPECIES,
AND CONDITION CLASS

AA[1]	APPROPRIATENESS	ACCESS[2]	SLOPE[3]	VEGETATION	CONDITION	ACRES
1	APPROPRIATE LANDS	LESS THAN ONE	HIGH	CONIFER ASPEN	POSTS & POLES	41
2	APPROPRIATE LANDS	LESS THAN ONE	LOW	CONIFER ASPEN	POSTS & POLES	8,156
3	APPROPRIATE LANDS	MORE THAN ONE	HIGH	CONIFER ASPEN	POSTS & POLES	16
4	APPROPRIATE LANDS	MORE THAN ONE	LOW	CONIFER ASPEN	POSTS & POLES	6,263
74	HIGH ROAD COST	LESS THAN ONE	LOW	CONIFER ASPEN	POSTS & POLES	2,044
5	APPROPRIATE LANDS	LESS THAN ONE	HIGH	CONIFER ASPEN	SAWTIMBER	144
6	APPROPRIATE LANDS	LESS THAN ONE	LOW	CONIFER ASPEN	SAWTIMBER	14,757
7	APPROPRIATE LANDS	MORE THAN ONE	HIGH	CONIFER ASPEN	SAWTIMBER	20
8	APPROPRIATE LANDS	ONE TO TWO	LOW	CONIFER ASPEN	SAWTIMBER	8,997
9	APPROPRIATE LANDS	TWO TO FOUR	LOW	CONIFER ASPEN	SAWTIMBER	3,852
10	APPROPRIATE LANDS	UNROADED	LOW	CONIFER ASPEN	SAWTIMBER	980
76	HIGH ROAD COST	LESS THAN ONE	LOW	CONIFER ASPEN	SAWTIMBER	358
77	HIGH ROAD COST	ONE TO TWO	LOW	CONIFER ASPEN	SAWTIMBER	1,767
11	APROPRIATE LANDS	LESS THAN ONE	LOW	CONIFER ASPEN	SEED SAP	1,684
12	APPROPRIATE LANDS	MORE THAN ONE	HIGH	CONIFER ASPEN	SEED SAP	11
79	HIGH ROAD COST	LESS THAN ONE	LOW	CONIFER ASPEN	SEED SAP	361
56	APPROPRIATE LANDS	LESS THAN ONE	LOW	EVEN AGED ASPEN	POSTS & POLES	14,776
57	APPROPRIATE LANDS	MORE THAN ONE	HIGH	EVEN-AGED ASPEN	POSTS & POLES	44
58	APPROPRIATE LANDS	MORE THAN ONE	LOW	EVEN-AGED ASPEN	POSTS & POLES	14,074
102	HIGH ROAD COST	LESS THAN ONE	LOW	EVEN-AGED ASPEN	POSTS & POLES	306
59	APPROPRIATE LANDS	LESS THAN ONE	HIGH	EVEN AGED ASPEN	SAWTIMBER	13
60	APPROPRIATE LANDS	LESS THAN ONE	LOW	EVEN AGED ASPEN	SAWTIMBER	22,694
61	APPROPRIATE LANDS	MORE THAN ONE	HIGH	EVEN-AGED ASPEN	SAWTIMBER	10
62	APPROPRIATE LANDS	ONE TO TWO	LOW	EVEN-AGED ASPEN	SAWTIMBER	14,405
63	APPROPRIATE LANDS	TWO TO FOUR	LOW	EVEN AGED ASPEN	SAWTIMBER	5,356
64	APPROPRIATE LANDS	UNROADED	LOW	EVEN AGED ASPEN	SAWTIMBER	875
105	HIGH ROAD COST	LESS THAN ONE	LOW	EVEN AGED ASPEN	SAWTIMBER	47
65	APPROPRIATE LANDS	LESS THAN ONE	LOW	EVEN-AGED ASPEN	SEED SAP	1,455

AA[1]	APPROPRIATENESS	ACCESS[2]	SLOPE[3]	VEGETATION	CONDITION	ACRES
66	APPROPRIATE LANDS	MORE THAN ONE	LOW	EVEN-AGED ASPEN	SEED SAP	675
109	HIGH ROAD COST	LESS THAN ONE	LOW	EVEN-AGED ASPEN	SEED SAP	517
67	APPROPRIATE LANDS	LESS THAN ONE	HIGH	SELF REGENERATING	ASPEN	22
68	APPROPRIATE LANDS	LESS THAN ONE	LOW	SELF-REGENERATING	ASPEN	29,620
69	APPROPRIATE LANDS	MORE THAN ONE	HIGH	SELF-REGENERATING	ASPEN	109
70	APPROPRIATE LANDS	ONE TO TWO	LOW	SELF-REGENERATING	ASPEN	11,953
71	APPROPRIATE LANDS	TWO TO FOUR	LOW	SELF-REGENERATING	ASPEN	2,601
72	APPROPRIATE LANDS	UNROADED	LOW	SELF-REGENERATING	ASPEN	315
13	APPROPRIATE LANDS	LESS THAN ONE	LOW	ES AF-DF	NONSTOCKED	504
14	APPROPRIATE LANDS	LESS THAN ONE	HIGH	ES-AF-DF	POSTS & POLES	12
15	APPROPRIATE LANDS	LESS THAN ONE	LOW	ES-AF-DF	POSTS & POLES	13,757
16	APPROPRIATE LANDS	MORE THAN ONE	HIGH	ES-AF DF	POSTS & POLES	84
17	APPROPRIATE LANDS	MORE THAN ONE	LOW	ES-AF DF	POSTS & POLES	4,721
18	APPROPRIATE LANDS	LESS THAN ONE	HIGH	ES-AF-DF	SAWTIMBER	744
19	APPROPRIATE LANDS	LESS THAN ONE	LOW	ES AF-DF	SAWTIMBER	114,511
20	APPROPRIATE LANDS	MORE THAN ONE	HIGH	ES AF-DF	SAWTIMBER	737
21	APPROPRIATE LANDS	ONE TO TWO	LOW	ES-AF-DF	SAWTIMBER	54,840
22	APPROPRIATE LANDS	TWO TO FOUR	LOW	ES-AF-DF	SAWTIMBER	16,889
23	APPROPRIATE LANDS	UNROADED	LOW	ES-AF-DF	SAWTIMBER	3,997
24	APPROPRIATE LANDS	LESS THAN ONE	LOW	ES-AF DF	SEED SAP	5,237
25	APPROPRIATE LANDS	MORE THAN ONE	HIGH	ES AF DF	SEED SAP	62
26	APPROPRIATE LANDS	MORE THAN ONE	LOW	ES AF-DF	SEED SAP	622
27	APPROPRIATE LANDS	LESS THAN ONE	HIGH	LODGEPOLE PINE	MISTLETOED	188
28	APPROPRIATE LANDS	LESS THAN ONE	LOW	LODGEPOLE PINE	MISTLETOED	22,984
29	APPROPRIATE LANDS	MORE THAN ONE	HIGH	LODGEPOLE PINE	MISTLETOED	1,191
30	APPROPRIATE LANDS	ONE TO TWO	LOW	LODGEPOLE PINE	MISTLETOED	15,020
31	APPROPRIATE LANDS	TWO TO FOUR	LOW	LODGEPOLE PINE	MISTLETOED	2,077
32	APPROPRIATE LANDS	LESS THAN ONE	LOW	LODGEPOLE PINE	NONSTOCKED	652
33	APPROPRIATE LANDS	LESS THAN ONE	HIGH	LODGEPOLE PINE	POSTS & POLES	525
34	APPROPRIATE LANDS	LESS THAN ONE	LOW	LODGEPOLE PINE	POSTS & POLES	13,459
35	APPROPRIATE LANDS	MORE THAN ONE	HIGH	LODGEPOLE PINE	POSTS & POLES	22
36	APPROPRIATE LANDS	MORE THAN ONE	LOW	LODGEPOLE PINE	POSTS & POLES	5,372
37	APPROPRIATE LANDS	LESS THAN ONE	HIGH	LODGEPOLE PINE	SAWTIMBER	184
38	APPROPRIATE LANDS	LESS THAN ONE	LOW	LODGEPOLE PINE	SAWTIMBER	15,014
39	APPROPRIATE LANDS	ONE TO TWO	LOW	LODGEPOLE PINE	SAWTIMBER	5,978
40	APPROPRIATE LANDS	TWO TO FOUR	LOW	LODGEPOLE PINE	SAWTIMBER	141
41	APPROPRIATE LANDS	UNROADED	LOW	LODGEPOLE PINE	SAWTIMBER	295
42	APPROPRIATE LANDS	LESS THAN ONE	LOW	LODGEPOLE PINE	SEED SAP	3,522
43	APPROPRIATE LANDS	LESS THAN ONE	LOW	LODGEPOLE PINE	STAGNATED	815
44	APPROPRIATE LANDS	MORE THAN ONE	LOW	LODGEPOLE PINE	STAGNATED	1,927
45	APPROPRIATE LANDS	LESS THAN ONE	LOW	PONDEROSA PINE	NONSTOCKED	3,230
46	APPROPRIATE LANDS	MORE THAN ONE	LOW	PONDEROSA PINE	NONSTOCKED	4,515
47	APPROPRIATE LANDS	LESS THAN ONE	LOW	PONDEROSA PINE	POSTS & POLES	1,114
48	APPROPRIATE LANDS	MORE THAN ONE	LOW	PONDEROSA PINE	POSTS & POLES	944
49	APPROPRIATE LANDS	LESS THAN ONE	HIGH	PONDEROSA PINE	SAWTIMBER	38
50	APPROPRIATE LANDS	LESS THAN ONE	LOW	PONDEROSA PINE	SAWTIMBER	36,513
51	APPROPRIATE LANDS	ONE TO TWO	LOW	PONDEROSA PINE	SAWTIMBER	18,493
52	APPROPRIATE LANDS	TWO TO FOUR	LOW	PONDEROSA PINE	SAWTIMBER	1,464
53	APPROPRIATE LANDS	UNROADED	LOW	PONDEROSA PINE	SAWTIMBER	3,050
54	APPROPRIATE LANDS	LESS THAN ONE	LOW	PONDEROSA PINE	SEED SAP	4,284
55	APPROPRIATE LANDS	MORE THAN ONE	LOW	PONDEROSA PINE	SEED SAP	1,085

1 See Table F-8 in the planning records (R-1920-2-1-N) to convert FSEIS analysis areas to DSEIS and mapped analysis areas Table F-8 was not included in the appendix F due to its length (22 pages) and limited utility

2 High sloped analysis areas were left in the suited land base as the District mapping effort indicated these sites were in fact on less than 40% slopes Project level analysis will determine whether or not this is true Lands which are in fact on steep slopes are not part of the suited lands base High slopes are greater than 40% Low slopes are less than 40%

3 Unroaded means timber stand is greater than four miles from a logging road

TABLE F-4

COMPARISON OF 1983 FOREST PLAN AND AMENDMENT SUITED LAND BASE

A. By Species	1983 Forest Plan Suited Acres	Amendment Suited Acres	Percent Change From 1983 Forest Plan
Aspen	22,183	169,318	663%
Spruce-Fir	307,448	216,717	-30%
Ponderosa Pine	54,201	74,730	38%
Lodgepole Pine	92,419	89,366	-3%
Total	476,251	550,131	16%

B. By Size Class	1983 Forest Plan Suited Acres	Amendment Suited Acres	Percent Change From 1983 Forest Plan
Sawtimber	397,246	433,243	9%
Post & Pole	39,278	88,472	125%
Seedling Sapling	7,121	19,515	174%
Nonstocked	32,606	8,901	-73%
Total	476,251	550,131	16%

TABLE F-5

AVERAGE ANNUAL TIMBER HARVEST BY DECADE & LONG TERM SUSTAINED YIELD (LTSY)

	SAWTIMBER		POL		TOTAL	
DECADE	MCF/YEAR	MBF/YEAR	MCF/YEAR	MBF/YEAR	MCF/YEAR	MBF/YEAR
1	4,667	21,000	4,460	17,840	9,127	38,840
2	4,667	21,000	4,961	19,844	9,628	40,844
3	6,578	29,601	4,961	19,844	11,439	49,445
4	6,578	29,601	4,961	19,844	11,539	49,445
5	6,578	29,601	4,961	19,844	11,539	49,445
6	6,578	29,601	4,961	19,844	11,539	49,445
7	6,578	29,601	4,961	19,844	11,539	49,445
8	6,578	29,601	4,961	19,844	11,539	49,445
9	6,578	29,601	4,961	19,844	11,539	49,445
10	6,578	29,601	5,022	20,088	11,600	49,689
11	6,578	29,601	5,022	20,088	11,600	49,689
12	6,578	29,601	5,022	20,088	11,600	49,689
13	6,578	29,601	5,022	20,088	11,600	49,689
14	7,304	32,868	5,022	20,088	12,326	52,956
15	7,304	32,868	5,022	20,088	12,326	52,956
LTSY°	8,345	37,552	5,738	22,952	14,083	60,504

° The LTSY distribution between Sawtimber and POL are based on relative proportions in decade 15.

TABLE F-6

AVERAGE ANNUAL SILVICULTURAL TREATMENTS BY PERIOD (ACRES)

Period	Intermediate	Reforestation	Shelterwood	Clearcut	Total
1	200	870	5,220	2,100	8,390
2	200	960	5,170	2,230	8,560
3	200	3,590	6,450	1,620	11,960
4	690	3,580	6,300	1,630	12,200
5	630	1,480	5,870	1,460	9,440

TABLE F-7

TOTAL ALLOWABLE SALE QUANTITY (ASQ) & PROGRAMMED SALE STATEMENT
For Decades 1 & 2

		Decade 1 1991-2000			Decade 2 2001-2010		
NIC COMPONENT	UNITS	ASQ	NONCHARGEABLE	PROGRAM SALE QUANTITY	ASQ	NONCHARGEABLE	PROGRAM SALE QUANTITY
SAWTIMBER	MMCF MMBF	46 7 210.0	0.0 0.0	46.7 210.0	46.7 210.0	0.0 0.0	46.7 210.0
ASPEN POL	MMCF MMBF	38 5 154.0	5 2.0	39 0 156.0	38 5 154.0	0 5 2.0	39 0 156.0
CONIFER POL	MMCF MMBF	6 1 24 4	4 5 18 0	10 6 42 4	11 1 44 4	4 5 18 0	15 6 62 4
TOTAL	MMCF MMBF	91 3 388 4	5 0 20 0	96 3 408 4	96 3 408 4	5 0 20 0	101.3 428 4

The nonchargeable volume in Table F-7 is based on a portion of annual personal use firewood sales. Total personal use firewood sales amount to between 5 MMBF and 6 MMBF annually, of which .2 MMBF is nonchargeable aspen and 1 8 MMBF is nonchargeable conifer. The rest comes from Ponderosa Pine killed by the Mountain Pine Beetle which would have otherwise been sold as sawtimber. The killed pine is chargeable volume and counts against the ASQ.

APPENDIX H

MINERAL LEASING STIPULATIONS

MINERAL LEASING STIPULATIONS

Current direction governing Forest Service response to mineral leasing proposals is contained in Management Activities G02,4 and G03,5-7 of Chapter III. This appendix supplements that direction by listing the stipulations which can be attached to mineral leases and displaying the conditions under which these stipulations are to be applied.

The term 'lease', as used in this appendix, also applies to mineral licenses and permits. Although only 'recommendations' are discussed, the direction in this appendix also applies to situations where the Forest Service has consent authority over lease issuance.

AREAS WITHDRAWN FROM MINERAL LEASING

No new lease may be issued in any area that has been withdrawn from the leasing laws. Such areas include Wilderness areas, which were withdrawn from mineral entry on midnight, December 31, 1983. The Forest will make clear in its leasing reports when a leasing proposal includes an area that has been withdrawn.

AREAS AVAILABLE FOR MINERAL LEASING

Areas available for mineral leasing include all areas not withdrawn from the mineral leasing laws. Such areas may receive a recommendation against leasing, but only as discussed under 'No-Lease Areas' below.

No-Lease Areas

These are areas that receive a recommendation against leasing because they do not meet the reclamation or restoration criteria listed in Management Requirements G02,4 (Sections 1c, 2c, 3c) and G03,5-7 (Sections 1c, 2d, 3e) of Chapter III. Recommendations against leasing are to be based on site-specific data.

Stipulations Available for Use

This section lists mineral leasing stipulations currently available for use. Criteria for selection are also presented. Stipulation recommendations must be based on site-specific data. When a choice of stipulations is available to solve a particular problem, the least restrictive one should be selected.

Forest Service Stipulation 1 - This is a Service-wide stipulation that places lease operations on National Forest System lands under USDA rules and regulations. It is to be attached to all leases (Forest Service Manual 2822.42).

MINERAL LEASING STIPULATIONS

TABLE OF CONTENTS

Forest Service (R-2) Supplement A (Limited Surface Use) - This is a Regional stipulation that restricts activities to those 'essential' to development of the lease. It is to be used for major areas which require such restrictions in order to protect sensitive surface resource values. Areas or sites to which this stipulation may be applied are:

- Recreation sites
- Critical wildlife habitat
- Natural history resources
- Cultural history resources
- Seed production areas
- Plantations
- Research or special study areas
- Designated areas of State interest
- Areas identified in Forest Travel Management Plans where off-road vehicle use is prohibited
- Areas with extremely sensitive soil, water or geologic conditions (optionally including 40-60% slopes)
- Areas with extremely sensitive landscape conditions (Visual Quality Objective = Retention)
- Areas designated as 'non-motorized' in the Recreation Opportunity Spectrum
- Areas eligible for inclusion in the National Register of Natural Landmarks or National Register of Historic Places
- Areas where the 'No-Lease' criteria are met, but which fall in any of the following Management Area Prescriptions: 2B, 4D, 6B, 7A, 7C, or 7E.

Forest Service (R-2) Supplement B (Conditional No Surface Disturbance) - This is a Regional stipulation that provides for approval of operations 'only if' submitted operating plans satisfactorily provide for surface resource protection in areas having specifically-identified sensitive conditions. This stipulation is to be applied only in situations where adequate surface resource protection against known risks cannot be assured without having completed operating plans in hand.

Forest Service (R-2) Supplement C (Activity Coordination) - This is a Regional stipulation intended for use in areas where resource values are sensitive to high levels of activity. The stipulation is normally attached to all leases in a sensitive area; it is implemented during operations by (1) having a single operator conduct all operations, and/or (2) specifying a sequence of activities timed and located in such manner as to keep activity levels below those considered irreparably detrimental to the resource values at risk. Due to the somewhat elaborate nature of the operating restrictions made possible by this this stipulation, it will not normally be used unless a case-specific environmental analysis indicates the necessity of its use.

Forest Service (R-2) Supplement D (Surface Use Stipulation) - This is a Regional stipulation that prohibits significant surface disturbance in certain areas (i. e., it is a 'no surface occupancy' stipulation). It is to be applied when: (1) portions of the proposed lease area meet the 'No-Lease' criteria defined above, and (2) those portions are within 0.5 mile of areas not meeting the 'No-Lease' criteria. A qualifying circular area 1 mile in diameter will thus receive Supplement D, while an area greater than 1 mile across will have a 0.5-mile halo of Supplement D and a core of 'No-Lease'.

Forest Service (R-2) Supplement E (Further Planning Area) - This is a Regional stipulation that is to be applied to all Further Planning Areas.

Forest Service (R-2) Supplement F (Classified Area) - This is a Regional stipulation that provides for special protection of areas which have been designated by the Regional Forester for special management under 36 CFR 294. These areas include: Scenic Areas, Historical Areas, Geological Areas, Botannical areas, Zoological Areas, Paleontological Areas, and Archaeological Areas. For such areas the Forest recommends lease issuance with Stipulation 1 and Supplement F.

(Experimental forests, experimental ranges, and research natural areas are also considered to be classified areas. However, the Authority to respond to BLM lease proposals for these areas is retained by the Chief of the Forest Service. For these areas the Regional Forester will recommend to the Chief either approval or rejection of the lease application based on the findings of appropriate environmental analysis. The Chief will make the final recommendation to BLM.)

Forest Service (R-2) Supplement G (Wild and Scenic Rivers System) - This is a Regional stipulation that provides for special protection of rivers under study for possible inclusion in the National Wild and Scenic River System. It is to be applied in all qualifying instances.

Reserved Areas

These are areas usually not available for mineral exploration and development activities because of statute, regulation, withdrawal, or Forest Service policy. The decision on leasing proposals for such areas--if not precluded by statute, regulation or withdrawal--is retained by the Chief. As appropriate, the Forest will prepare a site-specific environmental analysis and will develop and forward a recommendation to the Regional Forester for review and referral to the Chief.

Forest Service Stipulation 1 SERIAL NUMBER_____

STIPULATION FOR LANDS OF THE NATIONAL FOREST SYSTEM
UNDER JURISDICTION OF
DEPARTMENT OF AGRICULTURE

The licensee/permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 26, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of the Interior in the license/prospecting permit/lease. The Secretary of Agriculture's rules and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of a permit/operation plan by the Secretary of the Interior, (2) uses of all existing improvements, such as Forest development roads, within and outside the area licensed, permitted or leased by the Secretary of the Interior, and (3) use and occupancy of the NFS not authorized by a permit/operating plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed

to

at

Telephone No.:

who is the authorized representative of the Secretary of Agriculture.

_____
Signature of Licensee/Permittee/Lessee

The requirements imposed by supplements to this Stipulation may be waived or modified if the surface resource conditions for which they are imposed materially change. In addition, as provided by Section 6 of the Lease (BLM 3109-11), if situations or conditions not foreseen in the lease stipulations occur, necessary and reasonable measures to insure environmental protection may be imposed.

WAIVER MODIFICATION

The conditions imposed by supplements to this Stipulation are hereby waived or modified as described:

_____ _____
Authorized Officer Date

FOREST SERVICE (R-2) SUPPLEMENT A
To Forest Service Stipulation 1

SERIAL NUMBER_____

LIMITED SURFACE USE

The licensee/permittee/lessee is hereby given notice that there are within the license/permit/lease area tracts that contain special values or surface constraints, or that are needed for special purposes and require special attention to prevent irreversible or irretrievable damages to surface resources, including wildlife. Surface use or occupancy upon such tracts will be authorized only upon satisfaction of two (2) conditions: (1) such use or occupancy must be demonstrated to be essential to operations; and (2) operating plans must provide for such measures as are satisfactory to the Forest Service for protection of the described special values and existing or planned special purpose uses which may conflict with the uses otherwise authorized by this license/permit/lease. After the Forest Service has been advised of proposed license/permit/lease operations, and on request of the operator, the Forest Service will furnish further data on the tracts containing special values, surface constraints for special purpose uses, which now include but are not limited to:

Description:

Reason for restriction and duration (if less than full time, designate months -- should there be a discovery of a producible resource, operating plan requirements will be adjusted accordingly):

_____
Signature of Licensee/Permittee/Lessee

NOTE: The applicant is encouraged to contact the District Ranger for further information regarding the restrictive nature of this stipulation.

(1/86)

FOREST SERVICE (R-2) SUPPLEMENT B
To Forest Service Stipulation 1

SERIAL NUMBER _____

CONDITIONAL NO SURFACE DISTURBANCE STIPULATION

The prospective licensee/permittee/lessee is given notice that parts of the lands described are affected by the following conditions:

	Check as Applies
- Slopes steeper than _____ percent. (40 percent, classified lands; 60 percent unclassified lands)	_____
- High erosion hazard.	_____
- High hazard for mass slope failure.	_____
- Threatened or endangered wildlife or plant species, as follows:	
- Activities will not be permitted that will jeopardize the survival or recovery of Federally-listed T&E species (_____ Name of Species)	_____
- Activities may or may not be permitted to intrude upon identified critical or essential habitat of Federally-listed species, and will not be permitted to intrude upon the animal or plant itself. (_____ Name of Species)	_____
- Activities may or may not be permitted to intrude upon identified habitat of an animal or plant listed by the State as threatened or endangered or by the Regional Forester as needing special management to prevent the need for Federal listing of the species as threatened or endangered; activites will not be permitted to intrude upon the animal or plant itself. (_____ Name of Species)	_____
- Low visual absorption capacity requiring special measures for mitigation.	_____

Should the prospective licensee/permittee/lessee accept this contract, this document is his acknowledgement that surface disturbance, including occupancy and use of the surface of those parts of the lands affected by the above-described conditions, will be authorized only if an operating plan can be devised that will provide for the surface resource protection required due to the above-described conditions. This stipulation is in effect for the following described lands:

_____
Signature of Licensee/Permittee/Lessee

NOTE: The applicant is encouraged to contact the District Ranger for further information regarding the restrictive nature of this stipulation before acceptance of this contract and the operator is encouraged to make the same contact well in advance of proposed operations.

(1/86)

FOREST SERVICE (R-2) SUPPLEMENT C
To Forest Service Stipulation 1

SERIAL NUMBER _____

ACTIVITY COORDINATION STIPULATION

This lease includes lands within _____

_____

which has resource values sensitive to high levels of activity. In order to minimize impacts to these resources, special conditions, such as unitization prior to approval of operations and/or limitations to spread surface disturbance activites over time and space may be required prior to approval and commencement of any operations on the lease.

This stipulation is in effect for the following described lands:

Reason for restriction:

_____
Signature of Licensee/Permitee/Lessee

NOTE: The applicant is encouraged to contact the District Ranger for further information regarding the restrictive nature of this stipulation.

(1/86)

FOREST SERVICE (R-2) SUPPLEMENT D
To Forest Service Stipulation 1

SERIAL NUMBER _____

SURFACE USE STIPULATION

Surface use or occupancy that would cause signifcant surface disturbance is not authorized for the lands described below. This does not apply to casual or other uses which do not significantly disturb surface resources. The operator must have advance approval of the authorized officers of the Bureau of Land Management (BLM) and the Forest Service for any surface uses related to lease operations.

Reasons for restriction:

_____
Signature of Lessee/Permitee/Licensee

NOTE: The applicant is encouraged to contact the District Ranger for further information regarding the restrictive nature of this stipulation.

(1/86)

FOREST SERVICE (R-2) SUPPLEMENT E
To Forest Service Stipulation 1

SERIAL NUMBER _____

FURTHER PLANNING AREA STIPULATION

The following described lands embraced in this lease/permit/license were identified in the Roadless Area Review and evaluation (RARE II) decision document as requiring further planning:

Future planning may identify all or part of these lands as suitable for Wilderness, and the lands so identified may ultimately be designated as Wilderness. Information made available to the Forest Service regarding discoveries of mineral deposits on these lands will be considered in the planning process and may be key factors in the land allocation.

Any terms of this lease/permit/license to the contrary notwithstanding, the following terms shall apply to the above-described lands:

1. Only exploration activities for the purposes of discovering and disclosing the extent of mineral deposits is allowed, until development and production operations are specifically concurred in by the Forest Service based on a land management plan and/or a specific environmental analysis of an operating plan.

2. Exploration plans must be specifically approved by the Bureau of Land Management and concurred in by the Forest Service. Plans for geophysical exploration must be approved by the Forest Service. The Forest Service will agree to reasonable access for conducting necessary exploration operations.

3. Any lands covered by this lease/permit/license which Congress designates as Wilderness shall become subject to the provisions of the applicable Wilderness legislation, and the Secretary of Agriculture's regulations and Forest Service policies pertaining thereto.

4. The lessee/permittee/licensee will be responsible as he deems necessary to protect his interest, for initiating requests to the Department of the Interior for suspension of lease/permit/license terms, rental, or minimum royalties. The Forest Service does not intend that the inclusion of this stipulation be construed as a basis to deny a request for suspension.

5. Until these lands are allocated to non-wilderness purposes, by a land management plan or specific environmental analysis and decision, mineral-related operations are subject to the following terms.

   a. Construction of access ways and operation sites will not be permitted in areas of extremely high environmental sensitivity where such construction would cause serious and irreparable environmental damage.

   b. Access way construction will be permitted only where existing access ways are inadequate or other methods of access are impractical.

   c. Access ways will be built to a standard no higher than required for passage of equipment and support personnel, and to protect surface resources.

   d. The access ways and other areas of operation will be reclaimed, as soon as they have served their purpose, to condition as near as practical to the surface condition existing prior to the authorized use of the lands.

This stipulation is hereby accepted.

_____ _____

Date Signature of Licensee/Permitee/Lessee

(1/86)